Mouton Grammar Library

Nikolaeva/Tolskaya
A Grammar of Udihe

W
DE
G

Mouton Grammar Library 22

Editors
Georg Bossong
Bernard Comrie

Irina Nikolaeva
Maria Tolskaya

A Grammar of Udihe

2001
Mouton de Gruyter
Berlin · New York

Acknowledgments

shortened version of this grammar was defended as a doctoral dissertation in 1999.

Preface

This book is the first substantial reference grammar of Udihe (Udehe, Udeghe), a little studied language of the Tungus branch of Altaic. At present Udihe is spoken as a first language by about 100 people in the Russian Far East. The language lacks a standardized writing system, and is only occasionally taught in schools. This grammar describes the so-called Southern dialect of Udihe, spoken on the banks of the Bikin and Iman rivers. The Northern dialect, spoken on the banks of the Khor, Anyui and Samarga rivers, differs only slightly.

Most of the examples cited in the current study are the result of fieldwork conducted between 1989 and 1997 in the settlement of Krasnyi Yar on the river Bikin. They are largely excerpts from original Udihe texts. Others are sentences produced by native speakers either spontaneously or in response to questions posed in Russian by the linguist conducting the interview. Although the latter examples may not be spontaneous, we believe they nevertheless encapsulate an essential linguistic competence.

Although this study is not meant as a comparative grammar of the two Udihe dialects, we have also taken a few examples from the Northern dialect. They are used, firstly, to illustrate slight dialectal divergences, and secondly – if the dialects do not differ on the point in question – to provide particularly illustrative examples. Examples in the Northern dialect are taken from published materials, in which case the appropriate reference is provided. We have used the following abbreviations to cite some of the sources of the sentence examples, followed by the relevant page numbers.

> K   = Kormušin (1998)
> SK   = Simonov and Kjalundzjuga (1998)
> SKX = Simonov, Kjalundzjuga, and Xasanova (1998–1999)

The materials of the Northern dialect are cited using a phonological transcription. This differs from the transcription originally used in the sources, which was partly phonetic and in most cases employed the Cyrillic alphabet.

Sentence examples are provided in phonological transcription with morpheme-by-morpheme glosses and functionally equivalent English translations. Words in the translations that are absent in the example are bracketed, except for personal pronouns. For the sake of economy, the personal pronouns, which are not marked for gender in Udihe, are all translated as 'he'. In the glosses the 1st person personal pronoun is indicated as 'me'. Russian proper names, and other terms that remain untranslated, are cited in the international transliteration system, while local

names are transliterated into English as they are found in English-language geographical reference books. For polysemantic Udihe words the glosses give the meaning appropriate to the given context, so the same word may be glossed in several ways. For example, the Udihe word *egdi* may be glossed either as 'many' or as 'much', and the postposition *edeisini* may be glossed either as 'if' or 'when', depending on the context.

Morphemes are separated with hyphens in both the Udihe text and the glosses. Stems are glossed by English lexical words, while other morphemes are glossed with abbreviations of category labels. When more than one English word is required to translate a Udihe word, they are linked by a period. The grammatical category that is not expressed by means of a separate morpheme is not reflected in the glosses, partly for reasons of economy, and partly because the decision on the presence or absence of the morphological null may sometimes be controversial. However, when two separate morphs are contracted to one for phonological reasons, this is indicated by a period in the glosses. Thus in the following examples convention (a) will be used instead of (b), or (c).

(a)   *Sagdä-ŋi-mi*   *mo:*   *bede*   *ute-ne:-mi* (← *utene-e-mi*).
         old-V-INF   tree   like   rotten.tree-V.PAST-1SG
         'I grew decrepit like an old tree.'

(b)   *Sagdä-ŋi-mi*   *mo:*   *bede*   *ute-ne:-mi.*
         old-V-INF   tree:NOM:SG   like   rotten.tree-V:PAST-1SG

(c)   *Sagdä-ŋi-mi*   *mo:-Ø*   *bede*   *ute-ne:-mi.*
         old-V-INF   tree-NOM:SG   like   rotten.tree-V:PAST-1SG

The period is also used for those few "portmanteau" morphs that do not result from phonological contraction at the synchronic level, for example, *-li* <CC.SS> (Conditional converb, same-subject), and *-lie* <CC.SS.PL> (Conditional Converb, same-subject, Plural).

Examples that only make up a fragment of a sentence are glossed in arrow brackets. In the translations of some examples we have included a grammatical specification of the meaning in round brackets. This is not intended as a gloss, but rather to facilitate understanding of the translation, for example:

     zugdi-tigi   'to the house (LAT)' or <house-LAT>

Unlike nominal stems, bare verbal stems are cited with a hyphen, for example *zü:-* 'saw' (a verb) versus *zü:* 'saw' (a noun). Embedded clauses are indicated by square brackets.

The grammar is intended to be a more or less comprehensive description. It follows the traditional structure: general introduction – phonology – morphology – syntax – texts – vocabulary – indexes. Much use is made of cross-references between the various chapters and sections. The morphological description is organized around inflectional and derivational forms. The

functions of some of these may be addressed in separate sections within the corresponding chapters. The syntactic part is mostly organized around various syntactic units such as, for example, the noun phrase, relative clause, adverbial clause and so on, but in some cases we also follow the function-to-form approach.

The grammar is not biased towards any particular theoretical framework, although in several cases we choose to explain within the text the basis of the notions used in the description. The terminology is intended to be theory-independent. The names of particular grammatical categories typical of Udihe are capitalized; adjectives derived from these, as well as general grammatical and semantic notions, are in lower case, for example, "Possessive suffix" (the suffix of the grammatical category Possessive) and "possessive construction", "possessive form", and "possessive meaning".

Abbreviations

A	Agent (semantic role)
ABL	Ablative case
ACC	Accusative case
ADJ	Adjectival derivational affix
AL	Alienable possession
AUG	Augmentative numeral
B	Benefactive (semantic role)
CAUS	Causative
CC	Conditional Converb
CIR	Circumstance (semantic role)
COL	Collective numeral
COM	Comitative
COND	Conditional
CONT	Contrastive focus particle
DAT	Dative case
DEC	Decausative
DES	Desiderative
DESN	Desiderative noun
DEST	Destinative case
DIV	Diversative
DIM	Diminutive
DIR	Directive
DIS	Disjunction
DIST	Distributive
DP	Destinative Participle
DUR	Durative
E	Essive (semantic role)
EV	Evidential
EX	Exclusive
EXP	Experiential
EXPR	Expressive
FOC	Focus
FUT	Future
FP	Future Participle
IC	Imperfective Converb
IM	Imperfective
IMI	Impersonal Infinitive

IMP	Imperative
IN	Inclusive
INC	Inchoative
IND	Indefinite pronoun
INF	Infinitive
INT	Intentional
INTN	Intensive
INTER	Interjection
INST	Instrumental case
HAB	Habitual
HORT	Hortative
L	Location (semantic role)
LAT	Lative case
LOC	Locative case
MULT	Multiplicative numeral
N	Nominal derivational affix
NEG	Negation
NOM	Nominative case
0	epenthetic vowel
O	Object (direct object)
ORD	Ordinal numeral
P	Patient/theme (semantic role)
PART	Partitive
PAS	Passive
PC	Perfective Converb
PERM	Permissive
PL	Plural
PP	Past Participle
PRES	Present
PROV	Pro-verb
PROL	Prolative case
PROP	Proprietive
PRP	Present Participle
PURP	Purposive Converb
REC	Reciprocal
REF	Reflexive
REP	Repetitive
RES	Resultative
REST	Restrictive numeral
S	Subject
SEM	Semelfactive
SING	Singulative
SUBJ	Subjunctive
SG	Singular

SS   Same-subject
V   Verb, verbal derivational affix
VOC   Vocative

Table of contents

Plates

1. Susan Čufuevič Geonka in traditional Udihe clothing
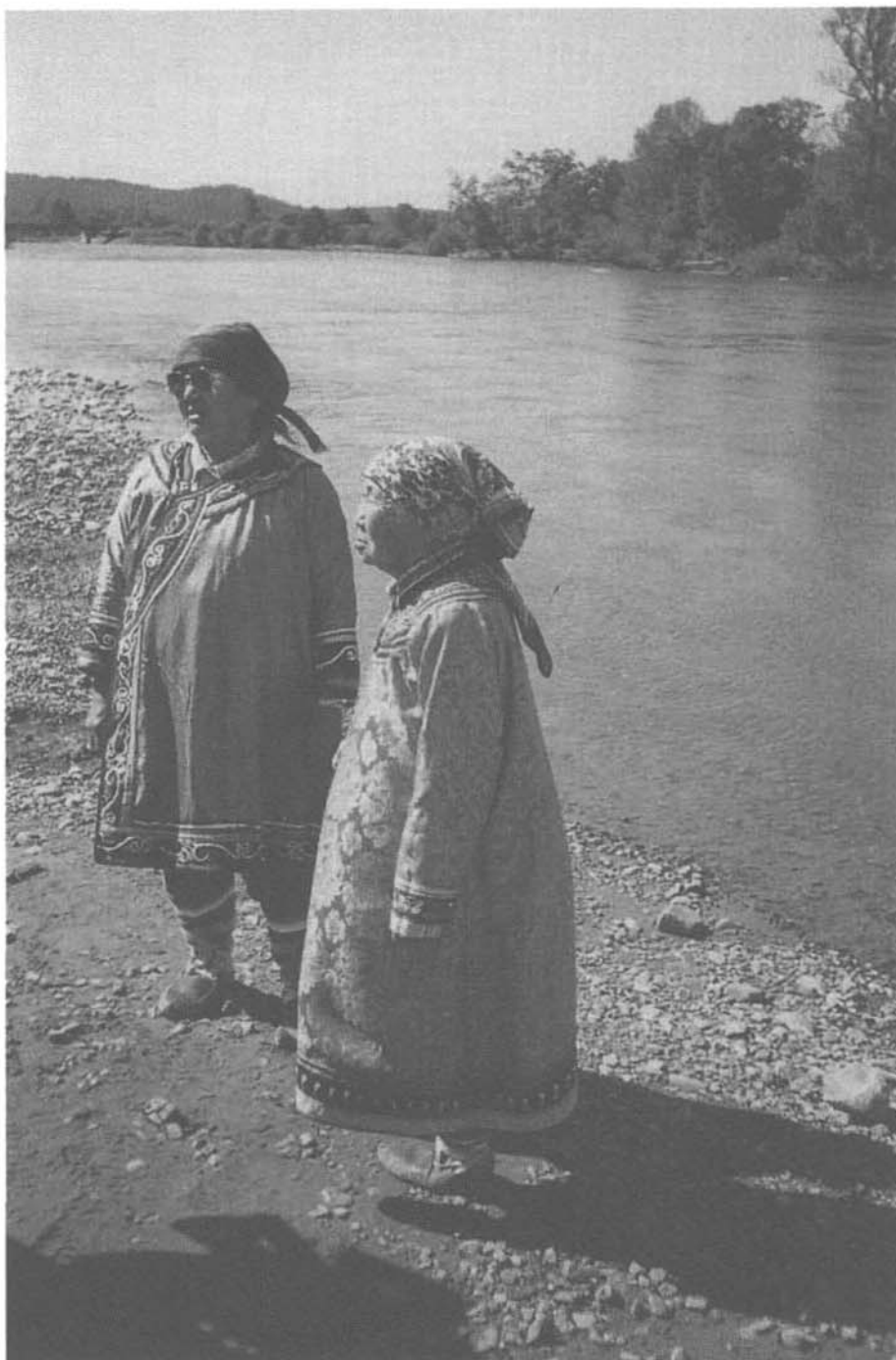
2. Udihe women on the bank of the river Bikin

3. Nadežda Libatsanovna Martynova, a Udihe shaman
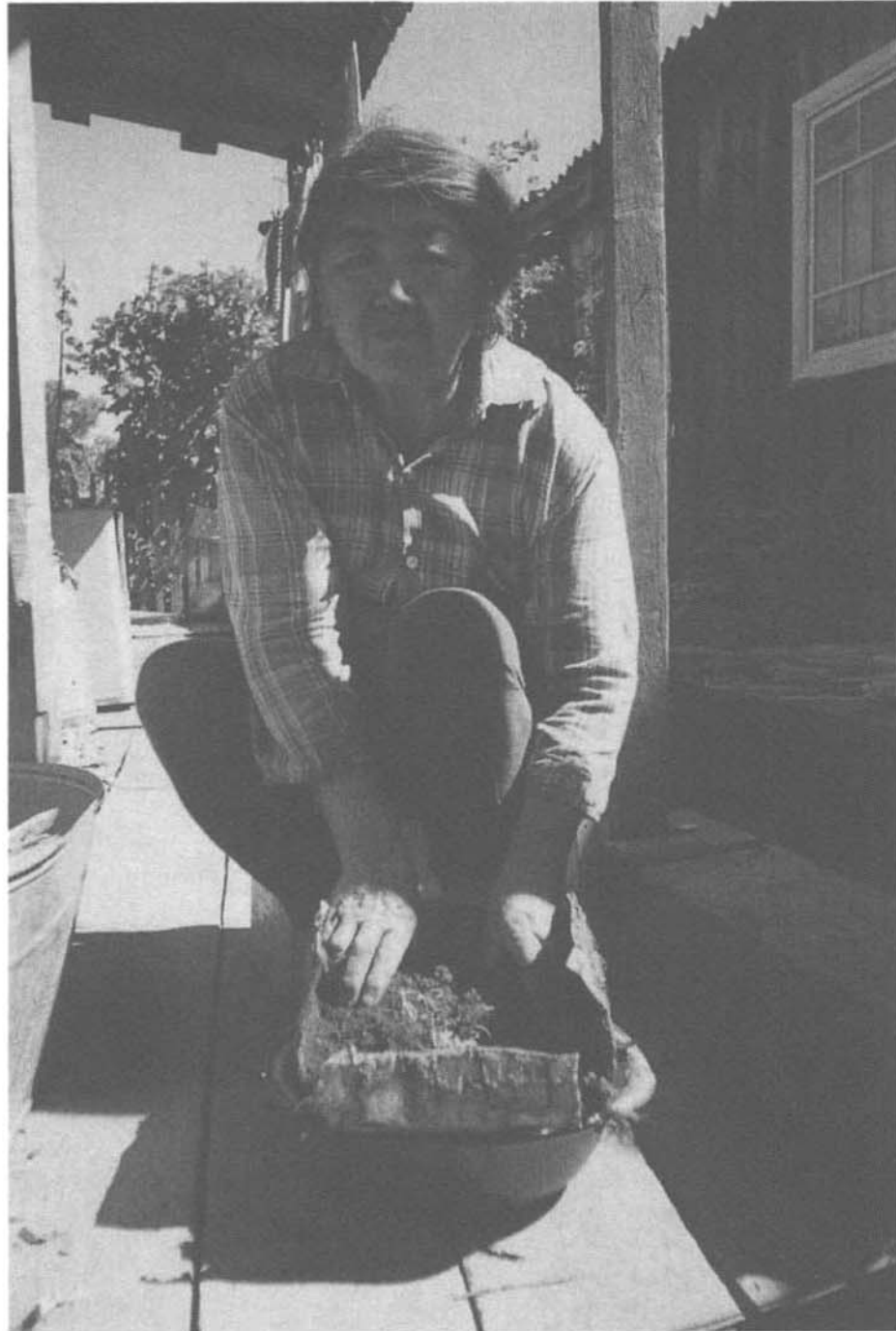
4. Nadežda Pavlovna Kukčenko is packing ginseng root into the
box made of cedar tree bark

5. Alexandr Egorovič Pionka with his wife
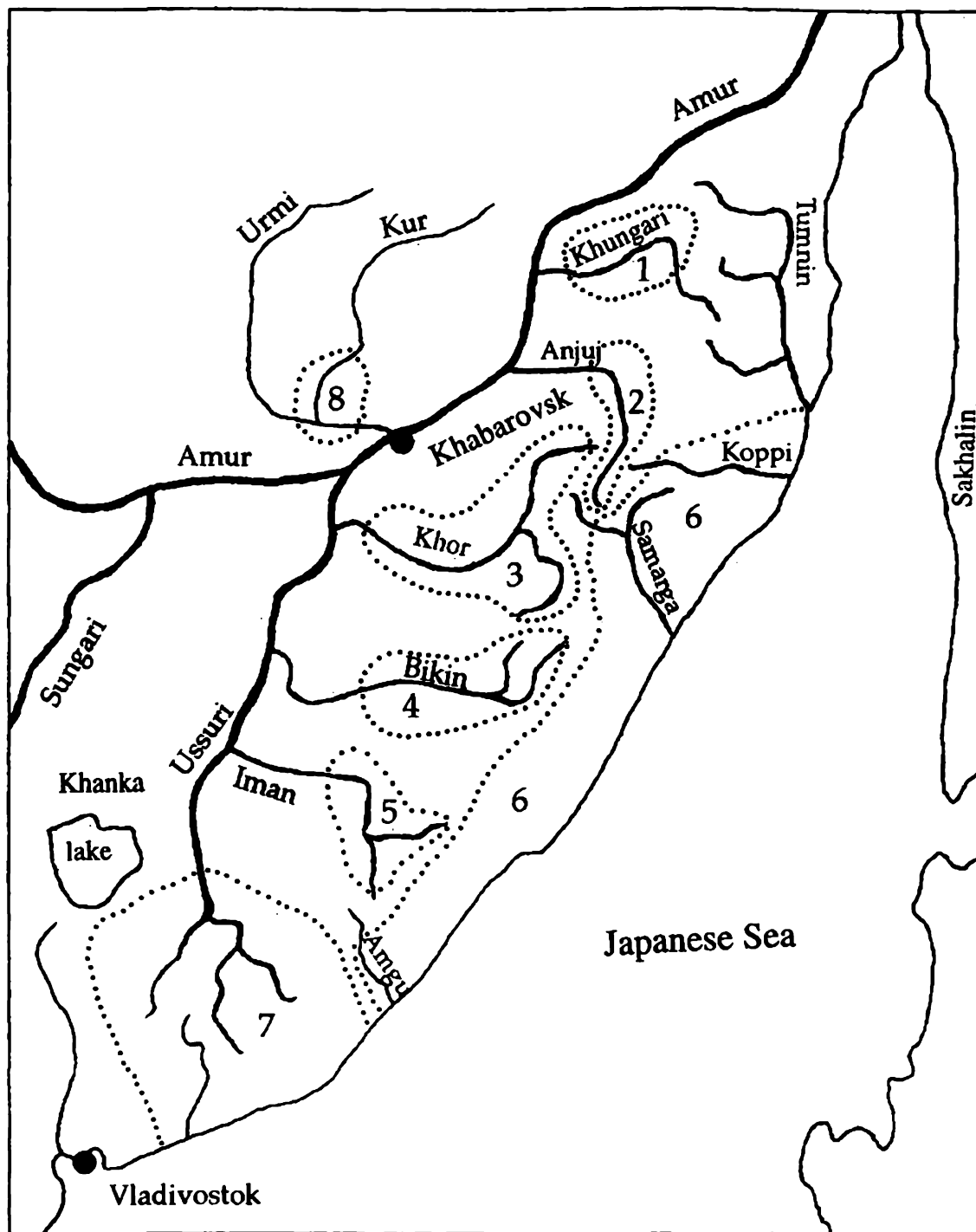
MAP 1: UDIHE CLANS
1. Xungake, 2. Uninka, 3. Xunka, 4. Bikinka, 5. Imanka, 6. Samarginka,
7. Namunka, 8. Kur-Urmi

Chapter 1
Introduction

1.1. The Udihe language and its genetic affiliation

Udihe (other spellings used are *Udehe, Udegej, Udege, Udeghe, Udige, Udighe, Ude*) is a Tungus language spoken as a first language by approximately 100 people, all over 50 years old, in the southern part of the Russian Far East (see 1.2.3 for more information on the number of speakers and 1.2.4 on its geographical location). Udihe is divided into two dialects each with several local variants (1.3). Despite a lack of official status or written tradition, several attempts have been made to create a writing system for use in schools (1.6.2, 1.6.3).

The Tungus (Tungus-Manchu) language family is widely assumed to be a branch of Altaic. The scheme in (1) represents the classification of the Tungus languages as accepted in Vasilevič (1960) and Sunik (1962: 16–20, 1968: 54, 1997: 154). The alternative classifications either group together the Manchu and Southern Tungus languages (Cincius 1949; Benzing 1955: 9–10; Menges 1978: 370; Comrie 1981: 58) or treat Northern Tungus, Southern Tungus, and Manchu as three independent branches (Avrorin 1959–1961). On some other classifications and/or comparisons between them see Menges (1968: 25–30), Ikegami (1974), Doerfer (1978), Vovin (1993), and Miller (1994).

(1)   Tungus-Manchu languages

      Tungus languages
           Northern (or: Siberian) group
               Evenk, Even (Lamut), Solon, Neghidal
           Southern (or: Amur, Nani) group
               Nanai subgroup
                   Ulcha, Nanai, Orok
               Udihe subgroup
                   Oroch, Udihe
      Manchu languages
           Manchu, Jurchen

The closest linguistic relative of Udihe is the Oroch language, spoken in roughly the same region. In fact, until the beginning of the twentieth century

the Udihe were thought to be part of the Oroch people, and were referred to as Orochs or Orochons (1.7.1). However, closer examination of the linguistic and anthropological data, as well as the oral tradition (see, for example, the collection of Oroch folklore in Avrorin and Lebedeva (1978)), suggests that they are in fact two different ethnic groups. On the phonetic and morphological correspondences between the Oroch and Udihe languages see Cincius (1949) and Kormušin (1998: 4–6).

1.2. The Udihe people

The modern Udihe live in settlements on the banks of the rivers of the Ussuri taiga. When first discovered, they were engaged in hunting, fishing, and the trading of furs (14.3). They subsequently took up agriculture, and in the second half of the twentieth century assimilated rapidly with Russian settlers, when their traditional way of life largely fell apart. However, elements of the traditional material culture survive, and many modern Udihe have retained animistic beliefs (1.4.5). Physically the Udihe are of Mongoloid anthropological type, and belong to the so-called Baikal type of the Mongoloid race. Certain southern (Manchu) anthropological components are also present.

1.2.1. The ethnonym *Udihe*

The Russian ethnographer Brailovskij was the first to suggest that the term *Udihe* be used as the official name of the people (Brailovskij 1901), see 1.7.1. It comes from the self-designation of the Udihe people in the northern dialect: *udihe*. In the southern dialect it corresponds to the word *udie*, from which originates another ethnonym sometimes used in the literature (*Ude*). On the different spelling variants see 1.1.

The ethnonym *udihe* ~ *udie* is of ancient origin and is attested in medieval Chinese sources (see Krušanov 1989 and references therein). However, its etymology is debatable. According to one opinion (Dolgix 1958), it goes back to the local hydronyms Ud, Uda, or Udil. Alternatively, it may be derived from the Jurchen *udaga* 'wild, barbaric, uncultured' (Arsen'ev 1916; Menges 1968: 130; Krušanov 1989). This name was used by Jurchens to refer to all the Tungus peoples of the Southern Primorje region who lived on the edge of the Jurchen empire (1.4.2). Is is also worth mentioning that phonetically similar tribal names are known for the neighboring Tungus peoples, for example, the Neghidal tribe Uddan, the Nanai tribe Udinka, and the Ulcha tribe Udi. Menges (1968) did not exclude the possibility that the component *-dige/-dihe* may be related to the Plural marker *-ziga*. Finally, Grebenščikov (1912) associated the

ethnonym Udihe with the name of a Manchu clan *we-cze* (*wu-je*) with the translation 'forest people', the idea being elaborated in Hiu Lie (1978).

1.2.2. Other names

When referring to the Udihe in the nineteenth century literature, the names Orochons, Oroches, and Tazes were mostly used. The term "Orochon", as well as the name of the related Tungus people Orok and Oroch, comes from the Tungus word *oron* 'reindeer' (Cincius 1977: 24–25). "Orochon" literally means 'reindeer-breeders' (*-čen* is a common Tungus suffix of *Nomina actionis*), although the breeding of reindeer was not an occupation characteristic of the Udihe.

The name Taz is used to refer to all groups of Udihe (for example, Brailovskij 1901). At present it is officially used only in connection with a group of people, numbering about 300 in the 1950s, who live in the Olginski district of the Primorje region. This group includes the Nanai and some of the southern Udihe, who have both undergone complete assimilation, first to the Chinese, and later to the Russians (Belikov and Perexval'skaja 1994). The ethnonym Taz goes back to the Chinese *t'a cze* 'aliens'(< *Jü-pi T'a-cze* 'fish skin aliens') (Menges 1968: 131) which the Chinese use to denote all the peoples of the Lower Amur.

The neighboring peoples refer to the Udihe by the various names cited in (2), after Krušanov (1989):

(2)	people	name referring to Udihe
	Korean	Olčan
	Evenk	Lamka, Lamunka
	Nanai	Namunka
	Nivkh	Tozung
	Manchu, Nanai, Ulcha	Kjaka, Kekar, Kjakar, Kjakala, Kjaxala

The ethnonym Kjaka, Kekar, Kjakar, Kjakala, Kjaxala, Kekal, etc. is known from Chinese sources, where it refers to the Tungus population of the Primorje region. It is also used to refer to one of the Oroch dialects. It most probably goes back to the name of a large Udihe clan, the *Kä* (see 1.2.5), and the common Tungus-Manchu stem *xala* 'family, clan, relatives' (Cincius 1975–1977: 459–460), see Krušanov (1989) and the references therein. According to another etymology (Menges 1968: 131) it may go back to the Nivkh *kjeqāř* 'dwarf'. The words Lamunka and Namunka literally mean 'people living on the sea'.

1.2.3. Population figures

Exact data about the number of Udihe before the late nineteenth century is missing. It is known that the Udihe population was considerably reduced as a result of several epidemics in the second half of the nineteenth century (in particular the smallpox epidemic of 1877). The data of the official population censuses in the 20th century are presented in table 1.

Table 1. Population figures

census	number of Udihe in Russia/the USSR	number of Udihe and Oroch together	number of speakers of Udihe	number of speakers for whom Udihe is their first language
1897		2,407		
1926	1,357	2,003		
1959	1,444			1,165 (73.7%)
1970	1,469		937 (63.8 %)	809 (55.1 %)
1979	1,551		582 (37.5 %)	480 (31.0 %)
1989	2,011		528 (26.2 %)	[100] (5%)

No official data is available on the numbers who at present consider Udihe their first language. The number 100 is an informal guess (cf. 80 speakers suggested in Girfanova 1994).

On the sociolinguistic status of Udihe see 1.6.4.

1.2.4. Geographical location

In the nineteenth century the Udihe lived throughout a vast area between the rivers Ussuri and Amur, and the Sea of Japan. They live on the right-hand tributaries of the Ussuri (the Iman, Bikin, Khor, and Vaku), of the Amur (the Anyui and Khungari), and of the Tunguska (the Kur and Urmi), as well as on the sea shore and on some rivers that run into the Tatar Strait (the Samarga, Nelma, Edinka, etc.).

The Udihe no longer live in the coastal area, but are scattered over an extensive territory in the Khabarovsk region and on the Ussuri taiga, and in the northern part of the Primorje region. The distribution of the modern Udihe among the administrative regions is almost equal: in 1979 there were 660 people in the Primorje region and 609 people in the Khabarovsk region. Basically, the Primorje Udihe (with the exception of the Udihe from Agzu) speak the southern dialect, and the Khabarovsk Udihe the northern dialect (1.3.1). On the names of the Udihe villages, and the Udihe clans that live in them, see 1.2.5.

1.2.5. Udihe clans

In the nineteenth century, the Udihe used to live within eight territorial groups, each of which was subdivided into several clans. Most of the territorial groups took their name from the local river, adding the suffix *-ŋkA*. In the modern language this suffix still derives nouns with the meaning 'inhabitant of X' (5.1.1.3). The tribal names are formed in the same way from the names of smaller rivers, or they may be formed with the Plural suffix *-ziga* (4.1.2.1). Nowadays these tribal names are used only as family names. According to Kormušin (1998: 6), the average membership of a clan was about 50 people.

Three of the territorial groups have ceased to exist, while the others are greatly mixed. The table below shows the territorial groups, the corresponding clans (clan names are given in transliteration from Russian), and the larger settlements of their modern descendants (adapted from Perexval'skaja 1994).

Table 2. Udihe clans

Group	territory	clans	modern settlements
Imanka	river Iman	Ajanka, Kja, Kjalunziga, Sigde, Kemenke	Vostretsovo, Melnichnoye, Novopokrovka, Dalni Kut (Krasnoarmeisk district)
Bikinka	river Bikin	Ajanka, Kaza, Amaziga, Kimonko (moved from Khor), Suljajnziga, Suanka, Sigde (moved from Iman), Pionka, Kja, Kjalunziga	Krasnyi Yar, Yasenevyi, Sobolinyi, Luchegorsk (Pozharsk district)
Xunka	river Khor	Bese, Kimonko, Kjalunziga, Suljajnziga	Gwasyugi (Lazo district)
Uninka	river Anyui	Amulinka, Kimonko, Suljajnziga, Kjalunziga	Rassvet, Arsenyevo (Nanai district)
Samarginka	river Samarga	Ajanka, Kaza, Kamanziga, Kimonko (moved from Khor), Pudzja, Samanziga	Agzu (Ternei district)
Namunka	sea coast, Ternei district	Ajanka, Samanziga, Kja, Kemenke, Suljajnziga	
Xungake	river Khungari	Amulinka, Kamanziga, Kanchuga, Kjalunziga	
Kur-Urmi	rivers Kur and Urmi	Kjalunziga, Amulinka, Sigde	(Kukan)

The Namunka and Khungake groups no longer exist, although they were mentioned by Schneider (1936) in the 1930s. Some of the coastal Udihe (the Namunka) assimilated to the Russians, while others moved to Bikin and joined the Bikin Udihe in the 1950s. Nothing is known about their language (or dialect). The Khungari group had apparently always been small, and assimilated to the Russian population. The Kur-Urmi group, which had always lived as close neighbors to the Nanai, Evenki, and others, is practically extinct as well: its only surviving members are two elderly brothers in the village of Kukan (Perexval'skaja 1994: 79).

There is some evidence that a small group of Udihe was found on Sakhalin island in the middle of the nineteenth century (see Podmaskin 1991: 3 and references therein), however, information about this is scarce.

1.3. Udihe dialects

Although there are so few speakers of Udihe, the language shows some dialectal division. Sunik (1968) noted that the divergence between dialects is significant, an idea that originated with the anthropologist Arsen'ev (1948–1949). In reality the divergences are minor (cf. Schneider 1936: 4) and the dialects are almost completely mutually intelligible. The greatest divergences are observed at the phonological and lexical levels (1.3.2), while the morphological and syntactic difference is insignificant.

Since there has been no standardization of the language, at present all the dialects have equal status. In the 1930s, when attempts were made to create a writing system, to publish textbooks and pieces of literature, and to teach Udihe in schools (see 1.6.2, 1.6.3), the Khor dialect was chosen as the standard literary language.

1.3.1. Dialect division

If we do not take into account the language of the two remaining speakers of the Kur-Urmi group (1.2.5), about which very little is known, the subdivision of the Udihe dialects may be represented as follows:

(i) The Southern dialect, that is, the dialect of the groups Bikinka and Imanka spoken in the Primorje region.

(ii) The Northern dialect, that is, the dialect of the groups Xunka, Uninka, and Samarginka spoken in the Khabarovsk region.

According to Sunik (1968: 231, 1997: 248), Girfanova (1994) and Simonov, Kjalundzjuga, and Xasanova (1998: 14), the main subdivisions of the Udihe dialects are as follows: (i) the dialect of Khor and Anyui; (ii) the dialect of Bikin and Iman; and (iii) the dialect of Samarga and Khungari. Kormušin

(1998) considers the language of Samarga, on the one hand, and of Bikin and Iman, on the other, as different local idioms of the same dialect. However, there are both linguistic and geographical reasons to believe that the language of the Khor, Anyui, and Samarga Udihe represents one dialectal system (cf. Perexval'skaja 1994) which differs in a number of linguistic features from the Bikin-Iman dialect (see 1.3.2). The Khungari group no longer exists (1.2.5).

1.3.2. Some divergent features of the dialects

1.3.2.1. Correspondence of the pharyngeal and laryngeal elements

The most important phonological difference between the dialects concerns the presence/absence of the postvocalic pharyngeal consonant *h*, which goes back historically to the intervocalic *-s-* (sometimes *-x-*). This pharyngeal consonant is still preserved in the Northern dialect, although even there a tendency is observed to lose it (Kormušin 1998). The partial loss of the pharyngeal consonants was mentioned for the Northern dialect as early as Sunik (1968: 216). In the Southern dialect the pharyngeal consonant was lost with the compensatory lengthening of the preceding vowel; and as a result, secondary long vowels have appeared. Examples of the dialect correspondences are:

(3)	Northern	Southern	
	ahnta	*a:nta*	'woman'
	imah	*ima:*	'snow'
	geh	*ge:*	'bad'
	imoh	*imo:*	'fat'

While the pharyngeal appears intervocalically in the Northern dialect, in the Southern dialect it falls out. The complex *VhV* in the Northern dialect corresponds to a vowel cluster, or to a long vowel, cf.:

(4)	Northern	Southern	
	nühö	*nüö > nö:*	'sable'
	ahikta	*aikta*	'pine tree'
	tehu	*teu > tu:*	'all'

The loss of the pharyngeal consonants in the Southern dialect has led to phonological changes in some grammatical morphemes. For example, the Northern subject agreement/possessive affix of the 1st person Singular *-i* and of the 2nd person Singular *-hi* formally coincide in the Southern dialect (both sound *-i*). The Northern 2nd person Plural inflection *-hu* and 1st person Plural

Inclusive -*u* both correspond to Southern -*u*. In the Northern dialect the Past tense marker for verbal stems that end in a non-high vowel is -*hA*-, while in the Southern dialect the Past tense is marked by the lengthening of the stem-final vowel in this case (see 7.1.2), cf. the Northern *olokto-ho-ni* and the Southern *olokto:-ni* 'he cooked' (where *olokto*- is 'cook', -*ho*- is the Past tense marker, and -*ni* is the 3ʳᵈ person Singular agreement marker). After *u*-final stems, the Northern Past marker -*hA*- (-*he*-) corresponds to the Southern -*o:*-, cf. the Northern *bu-he-ni* and the Southern *bu-o:-ni* 'he gave'.

Certain differences between the Northern and Southern dialects are also observed with respect to the realization of the laryngeal feature. Generally speaking, laryngealized ("creaky voice") vowels in the Southern dialect correspond to the complex "vowel+glottal stop". The system of correspondences is as follows:

(5)   historical source   Northern   Southern
      a. *-*k*-   *aʔ*   '*a* ("creaky voice")
      b. *-*s*-, *-*x*-   *ah*   *a:*

The Northern dialect thus preserves a more archaic system, where the laryngeal and pharyngeal elements, which historically go back to intervocalic consonants, are still consonantal segments. Note, however, that under a different analysis laryngealization and pharyngealization are realized even in the Northern dialect as vowel phonation types (for more information see 2.1.1.3.2).

1.3.2.2. Correspondences of affricates and sibilants

The Southern dialect has undergone a much stronger Chinese influence than the Northern (see 1.5.1). It has acquired more Chinese loanwords, and the phonological interference is stronger. In particular, apparently under Chinese phonological influence, the Southern dialect has developed alveolar affricates /c/ and /z/ instead of the original palato-alveolar affricates. In fact, as noticed in Kormušin (1998), alveolar pronunciation of affricates can also occur in some idiolects of speakers of the Northern dialect. The system of correspondences is as follows:

(6)   Northern   Southern
      ǯ   *z*   < *ǯ*
      č   *c* (except before *i*)   < *č*

The Northern palato-alveolar voiced affricate /ʒ/ corresponds to the alveolar non-anterior affricate /d͡ʒ/ in the dialect of Kur-Urmi (Elena Perexval'skaja, personal communication). Examples of dialect correspondence:

(7)	Northern	Southern	
	wakča-	*wakca-*	'hunt'
	wač'a	*wac'a*	'few'
	ʒikte	*zikte*	'blueberry'
	ʒas'a	*zas'a*	'cheap'

1.3.2.3. Lexicon

Examples of dialect divergences in the lexicon are in (8).

(8)	Northern	Southern	
	moude	*kuti*	'tiger'
	mafa	*soŋgo*	'bear'
	tali	*wui*	'garden'
	solodie	*b'agdifi*	'hello'
	xo:gʒo	*xo:ligi*	'yellow'
	xu:-	*zü:-*	'saw'
	ñogʒo	*ñoligi*	'green, blue'
	baŋčau	*olondo*	'ginseng'
	utiŋge:	*ugda*	'small boat'
	kala	*maŋguaŋa*	'saucepan'
	sañau	*tuduze*	'potatoes'

Sometimes the original Udihe word in the Northern dialect corresponds to the Chinese borrowing in the Southern dialect (see 1.5.1.2.1), while certain Northern words (for example *xo:gzo* 'yellow', or *ñogzo* 'blue, green') seem to be Nanai loanwords.

Idioms spoken on Samarga and Khor, on the one hand, and Bikin and Iman, on the other hand, have a number of local words unknown in another idiom within the same dialect. Some of them are mentioned in Simonov, Kjalundzjuga, and Xasanova (1998).

1.3.2.4. Morphology

The Northern dialect differs from the Southern dialect in the following morphological features.

(i) The absence of the marker -*du*- which in the Southern dialect serves as a 3rd person Plural affix in some verbal forms.

(ii) The impersonal or Plural, in the interpretation of Schneider (1936) Infinitive formed with the suffix -*mu* (it is, however, present in some idiolects even in the Southern dialect, see 7.5.3.1.2).

(iii) The (same-subject) Perfective same-subject converb derived with the suffix -*mdi*/-*mzi*, for example, *lagbana-mdi* 'having stuck', *za:-mdi* 'having taken', *te:-si-mdi* 'having sat'(Kormušin 1998), *ŋua-mzi* 'having slept' (SK 671), *diŋe-mzi* 'having pressed' (SK 283).

(9)   *ŋene-mzi*   *zugdi-le*   *ŋeni-e-ni.*
      go-PC.SS   house-LOC   go-PAST-3SG
      'Having left she went home.' (K 177)

Cf. the derivational nominal affix in the dialect of Bikin (5.1.3.15). These forms may ultimately go back to the Instrumental case of the Infinitive.

(iv) In the Northern dialect the Accusative remains morphologically unmarked under certain conditions (4.2.2.2); although this is also typical of the Southern dialect as well, in the Northern dialect the unmarked Accusative is far more regular.

(v) The Northern dialect possesses the special verbal forms in -*t*. They can be used as a same-subject perfective converb or as a finite verb, for example:

(10) a. *I:ŋgule*   *dogbo-dule*   *susaga-t*   *wo:-ni,*
          at.once   night-LOC   escape-PC.SS   make.PAST-3SG
          'ai-ne-fi   *ŋene-t*   *'ai-ne-fi*
          brother-PL-REF.PL   go-PC.SS   brother-PL-REF.PL
          zawa:-ni.
          take.PAST-3SG
          'She immediately escaped in the night, went to her brothers, and took her brothers.' (K 178).

      b. *Sumu-we-ni*   *käu*   *käu*   *zawa-t*
          sinew-ACC-3SG   all   all   take-PC.SS
          tagda-t   *sumu-we-ni.*   *nigbi-nigbi*
          pull-PC.SS   sinew-ACC-3SG   strong-strong
          tagda:-ni
          pull.PAST-3SG
          'Having taken hold of all his sinews, he pulled them very hard.' (K 113)

c. *Gihe*   *timana-ŋi-ni*   *mama*
    other   morning-AL3SG   grandmother
    diga-la-ni   *kiaŋa*   *wah-t.*
    eat-PURP-3SG   elk   kill-PC.SS
    'On the next day he killed an elk, so that the grandmother could eat.' (SKX 202)

Such forms typically express a sudden abrupt action. They are absent from the Bikin dialect.

(vi) On the difference in the formation of some types of numerals see 11.1.

Some other minor grammatical differences between dialects are mentioned in the text of the grammar.

1.3.3. The dialect described in the grammar

The present grammar is based on the Southern dialect of Udihe, namely the dialect of the Bikin Udihe as spoken in the settlement Krasnyi Yar (in 1989–1997). The settlement is located on the bank of the Bikin, the right tributary of the Ussuri, on its central stretch. It appeared in 1957 as a result of the integration of three settlements, Olon, Syain, and Metakheza. Later, some Udihe from Iman (the extinct settlement of Sanchikheza) also moved there.

Modern Krasnyi Yar is a multi-ethnic settlement. It numbers about 700 people, among whom about 455 (65%) are from the various Tungus people (the Udihe, Nanai, Oroch, and Evenki). However, the exact number of Udihe among them is difficult to establish. Clearly, the number of ethnic Udihe is considerably less (probably, about 350), while only about a quarter of this number know the native language to some extent, and perhaps no more than 30 can be considered native speakers. Russian is apparently spoken by all Udihe, and generally by all inhabitants of Krasnyi Yar. About 10 people are trilingual Udihe-Chinese-Russian (normally ethnic Nanai who moved to Krasnyi Yar from the settlements Olon or Verkhni Pereval), and about 5 people are trilingual Udihe-Nanai-Russian. There is also a small group of native speakers of Chinese who do not know Udihe (ethnic Nanai).

The dialect used in Krasnyi Yar is also spoken in neighboring settlements in the Pozharsk district, such as Yasenevo, Sobolinyi, Verkhni Pereval, and Luchegorsk. So although the grammar describes the modern dialect of Bikin, the language it deals with may also reflect certain peculiarities of the dialect of Iman. In certain cases we also found it appropriate to refer to data from the Northern dialect, namely, the materials on the Khor dialect of Schneider (Schneider 1935a, 1936) and Simonov, Kjalundzjuga, and Xasanova (1998), and the Samarga materials of Kormušin (1998). The latter were recorded

between 1964 and 1974, while most of Simonov's materials were recorded between the 1960s and 1985.

1.4. Some remarks on Udihe history and ethnography

This section is meant to introduce some basic information about Udihe history and traditional culture, as well as to explain certain words that can be found in the Udihe examples throughout the grammar. The section is largely based on Krušanov (1989), Perexval'skaja (1994), Kormušin (1998), and Simonov, Kjalundzjuga, and Xasanova (1998).

1.4.1. Origin

The Udihe are not autochthonous in their present territory, but their origin is still disputed. Two hypotheses have been advanced: one is that their origin is to the north, the other that it is to the south of their present territory (cf. Podmaskin 1989). The Udihe and the Oroch bear conspicuously southern physical features, which stem from Manchuria and China. This has led certain scholars (Schrenk 1883; Brailovskij 1901; Schirokogoroff 1926; Arsen'ev 1948; Albert 1956) to the conclusion that the homeland of the Udihe is the territory of Manchuria or the border of Northern Korea.

The "northern" theory was first advanced by Sternberg (1933). He thought that the Udihe came to their modern territory from the Amur region, whither they migrated from a still more northern district. This view is confirmed by their cultural affinity to the Oroch, and their linguistic connection to other Tungus people. In particular, as was shown by Cincius (1978), Udihe and Oroch are closer to the Northern Tungus languages (Evenki and Even) than other languages of the Southern group. Kormušin (1998) argues that both Udihe and Oroch were originally Northern Tungus languages that underwent the substratum and contact influence of the Southern Tungus languages Ulcha and Nanai, as well as of Manchu. Certain archaeological evidence also suggests that the Siberian tribes penetrated into the Primorje region as early as the late Neolithic (the end of the 2nd millennium BC) or the early Iron Age (the 1st millennium BC) (Okladnikov and Derevjanko 1973). Since that time Tungus cultures have continuously been present in that region.

The oral tradition of the Udihe and the anthropological data also indicate a complex origin. There is reason to believe that the Udihe as an ethnos appeared as a result of the assimilation of a certain local population of unknown origin (probably the so-called Paleoasiatics) by Tungus tribes who came from the north to the modern Udihe territory. There may have been an Ainu component present in Udihe ethnogenesis (Lar'kin 1958: 7, cf. also Vasilevič 1960 on

possible linguistic contacts), and, according to some scholars, a perhaps Nivkh component as well.

1.4.2. Ethnic history

A more or less direct continuity can be traced between the modern Udihe and the Udihe of the southern Primorje region, who used to belong administratively to the so-called Golden Empire of the Jurchens (Manchuria, 1115–1234). The Jurchens-Udege were a settled people, having a well-developed culture. However, in 1233 the Jurchen Empire was overthrown by the Mongol invasion, and this led to the gradual disintegration of the Jurchen population. The ancestors of the Udihe were forced to escape from the Mongols to more northern territories, where they mixed with other Tungus tribes.

In the early seventeenth century the Manchu again won control of Manchuria and northern China. The Udihe, as well as the Nanai, Ulcha, and Oroch, are descendants of those Tungus people who lived in the Amur and Primorje regions, but did not enter the Manchu Empire. Accordingly, these people suffered from frequent and destructive Manchu invasions, which also contributed to the reduction of the population, the partial destruction of the original tribal system, and gradual assimilation. Until as late as 1858–1860 the Udihe territories were controlled by Chinese administors and traders (on contacts with the Chinese see 1.5.1.1), however, they were not formally part of the Chinese Empire.

In 1860 the whole Ussuri region was incorporated into the Russian Empire, and since then the Udihe territory has been part of Russia. In 1897 the territories of the Udihe extended to the southern tributaries of the Ussuri, and along the coast as far as modern Nakhodka. At that time the Udihe could also be found on the Khungari, the Tunguska, and the other tributaries of the Amur, as well as along the shore of the sea of Japan. The Northern border of the Udihe land was the river Botchi (Kormušin 1998: 3), which separated it from the Oroch territory. Until practically the beginning of the twentieth century the Udihe lived within several territorial groups (see 1.2.5) and had no common ethnic identity. Influenced by the Nanai, the first permanent settlements of the Udihe began to grow on the River Anyui as early as the nineteenth century.

More permanent Udihe settlements developed after the 1930s, when the forcible collectivization of households began. The process was completed in about 1937, and in the late 1950s the smaller settlements were integrated into larger multi-national villages. Resettlement caused many families to change their mode of living, for example abandoning hunting and turning to cultivation and animal breeding. This transformation was hastened by logging, which reduced the land available for hunting (especially in the Khabarovsk region).

This was also the reason for the constant resettlement of the Udihe from their native areas.

1.4.3. Traditional occupations

The main traditional occupations of Udihe were hunting and fishing. Unlike their neighbors, the Nivkh, Nanai, and other settled peoples on the lower Amur, the Udihe way of life was closely connected to the taiga forest. They used to hunt for deer, elk, boar, and smaller animals using bows and spears (later, guns) and different kinds of traps. The primary purpose of hunting was to gain furs and meat, though antlers were also sold to the Chinese. The Chinese also bought the root of the ginseng plant that grew in the Ussuri taiga. Searching for this plant was one of the important occupations of the Udihe.

Unlike other Amur peoples, fishing played a less important part in their life. A secondary role was also played by collecting edible plants, such as ferns, wild garlic and onion, various berries, and tree juice, as well as gathering certain other plants used for medical treatment. In the nineteenth century only the southern Taz group of the Udihe were involved in agriculture. They followed the example of the Chinese, tilling their fields in the coastal river basins. At the present time, agriculture is practiced by all Udihe groups.

Traditionally, only men were involved in hunting and fishing. The normal occupations of women were processing (braking) skin and leather (Udihe *kaj-*), making richly ornamented clothes (mainly traditional Udihe *tege* 'gowns' worn by both men and women) and boots from fur and skins, and making boxes and kitchenware from birch bark. Men used to make various wooden things (boats, sledges, some kitchenware, cradles) and small metal objects.

1.4.4. Way of life

Like most of the other peoples of Siberia, the Udihe were semi-nomadic. The constant search for new hunting territories necessitated a mobile lifestyle. The Udihe lived in widely dispersed family groups, and resettled often, according to the areas being hunted. In summer they lived in conical tents made of branches and tree bark, and in grass tents (*aŋa, co:lo*), in winter in rectangular houses made of tree bark (*kawa*) with the fireplace in the middle, as well as in earth-houses. Their mode of transport included two types of boats (the *'ana* 'large hollowed boat with a flat nose' and the *ugda* 'small individual hollowed boat' often used while hunting), with sledges and skis in winter. The only domesticated animal was the dog, and no riding animals were known.

The Udihe used to live in family units with a patriarchal social organization. Although families used to live separately from one another, tribal

consciousness was extremely strong (see 1.2.5 on the names of the Udihe clans). The Udihe clans were strictly patrilocal; in marriage, the purchase or exchange of a bride between clans was widely practiced. Within every territorial group (1.2.5) there used to exist a division of 2–3 sub-groups, each of which included several clans. These sub-groups called *za:* in Udihe stood in exogamous relationship to each other (Krušanov 1989).

Individuals used to feel themselves members of the clan and not of the people (nation) in general. In practice, a man could not participate in social life without being part of a clan, could not get married, could not be protected by anybody, or have a hunting territory. Expulsion from the clan was therefore regarded as an extremely severe punishment. From the seventeenth century the original tribal organization began to be replaced by an organization based on territory (Podmaskin 1991: 4). However, the tribal consciousness is partly preserved. Of course many tribal customs (such as bride money or blood vengeance between the clans) are no longer practiced, but a certain mutual support between descendants of the same clan, and a half-hidden hostility towards representatives of other clans, can still be observed.

Since the Udihe did not undergo Christianization, their original anthroponymic system is preserved somewhat better than that of the other Siberian peoples. Traditional names are mostly based on kinship terms (*Ñ'äziga*, literally 'the smallest child in the family'), certain individual qualities of a person (*Alagdig'a*, literally 'beautiful'), or "protecting" negative nicknames often referring to animals or negative qualities (*G'aini*, literally 'raven'), etc. (Podmaskin 1991: 37–38). At present, the Udihe have a first name, a patronymic, and a family name. For older people the first name may coincide with the traditional Udihe name, while the younger generation has Russian names. The family name normally goes back to the traditional tribal names (see 1.2.5).

1.4.5. Traditional beliefs

The traditional Udihe religion can be characterized as animism, coupled with the practice of shamanism. Like many other peoples, the Udihe represented the Universe as a layered structure with at least three levels. The upper world is inhabited by the sky people (*bua ni:*) and the gods (for example, *Enduli* the main god, *Tagu-mama* the God who sends children into the world, and *Agdi* the God of thunder). The lower world may itself have different layers, one of which is the place where people's souls go after their death (*Bunige*). The actual world corresponds to the middle world of the structured Universe, and as well as real people it is inhabited by numerous evil (*ogzo, amba*) and good spirits, and other supernatural creatures. Every animal or natural phenomenon (fire, river, water, etc.) possesses its own master spirit (cf. *Puza* fire spirit,

Oŋku mountain spirit, *Ganixi* water spirit, *Olondo ezeni* 'master of ginseng'). The bear and tiger were especially respected. The worship of their spirits was expressed in numerous hunting rites, rituals, tabooistic terminology, and prohibitions.

According to traditional animistic beliefs, the human soul descended from the upper to the middle world in the shape of a little bird (*omö*) and then existed as an invisible little man (*xań'a*). After death it descended further into the realm of the dead in the form of a shadow, from where it could be reincarnated. In shamanic practice the soul of the shaman and/or his helping spirits also traveled through the different levels of the Universe. The most important function of shamans was to offer medical treatment.

In spite of the destructive influence of the socialist culture of the twentieth century, some elements of the animistic world outlook and the practice of shamanism are preserved among the older generation of Udihe.

1.4.6. Traditional folklore

The main traditional genres of Udihe folklore are *teluŋu* 'legend' (the historical, shamanistic, or hunting legend), *(n)imaŋku* '(fairy) tale', and *jexe* 'song'. As distinct from *teluŋu, (n)imaŋku* is characterized by supernatural elements, by the use of certain words specific to folklore (for example, *biatu* 'bear' instead of the usual *mafa*), by some phonetic peculiarities, and by the use of traditional singing refrains. Typical characters found in the fairy tales (given here with very approximate translations) are *jegdige* or *merge* 'hero' (a brave young man, a good hunter), *belie* 'fairy' (a beautiful, clever girl or young woman, sometimes with supernatural powers), *emende* 'witch' (an ugly, lazy, and stupid girl or young woman), *kanda mafa* 'old man', and *nauŋzaka* 'boy' (brave teenage boy, normally a younger brother of a *belie*). Many different musical genres were known, the lyric song being the most common. The Udihe used to play many string and wind instruments, the most important among them being the *kuŋkai* 'jaws harp'. Udihe folklore and its language is discussed in detail in Simonov, Kjalundzjuga, and Xasanova (1998).

1.5. The effect of language contacts on Udihe

At the present time, the Udihe do not have a single settled area. There are several ethnically pure Udihe settlements, and other settlements in which the Udihe are greatly mixed with the Nanai and to a lesser extent other Tungus people, as well as with Russians, Ukrainians, and some Chinese, Koreans, and Nivkh.

According to Belikov and Perexval'skaja (1991), throughout the last two centuries the Udihe territory was the location of a language area that included the following languages: Nanai, Udihe, Chinese, and Russian. This resulted in the process of pidginization, the most famous example of which is the emergence of the so-called Chinese-Russian pidgin, used at the end of the eighteenth century by Chinese and Russian traders and the local Tungus people (see, for example, Nichols 1980, 1986). According to this author, the dialect of Chinese-Russian pidgin spoken in the Ussuri area has undergone a secondary pidginization from the local Tungus-Manchu languages. The most striking example of a pidginization-driven phenomenon in Udihe grammar is the Past tense marker *-lA* (7.10.4.2). This marker can substitute (especially in the Iman dialect) for the regular Past tense without being followed by any agreement affixes. As argued in Perexval'skaja (1989, 1991e), this element is not original in Udihe, and presents a typical example of a so-called "double etymology": on the one hand, *-le* is a Perfective marker in Chinese, while on the other hand, *-l* is the Past tense marker in Russian, so the exact origin of this element in Udihe is difficult to establish. If the Russian etymology is accepted, the vowel-final form *-lA* in Udihe may be explained by the fact that Udihe does not generally allow consonant-final words (3.1.1), so *-A-* has here an epenthetic origin.

Menges (1968) also cites some hypothetical Korean and Mongolian loanwords in Udihe. The former are rare, and the latter were borrowed into Udihe through Manchu or other Southern Tungus-Manchu languages. Some Manchu etymologies are cited in 1.5.4. Certain plausible Nivkh parallels are mentioned in Kormušin (1998).

1.5.1. Chinese

1.5.1.1. Contacts with the Chinese people

Chinese-Udihe contact began through trade in the Middle Ages. Under the Ming dynasty (1368–1644) the Chinese gradually started building settlements in Udihe territories, and marrying local women (at that time Chinese woman were not allowed to leave the country). Until the second half of the nineteenth century the real rulers of the Primorje region were the Chinese traders of furs and ginseng, to whom many Udihe were hopelessly indebted. The relationship between the Udihe and the Chinese was generally hostile.

The Udihe acquired agricultural skills from the Chinese people, as well as such Chinese religious beliefs as could easily co-exist with their animistic world outlook.

The northern Udihe had fairly little contact with the Chinese people, but the influence of the Chinese on the southern Udihe groups was enormous. By the beginning of the twentieth century the most southern group (the Taz) had

become completely assimilated by the Chinese in their language and culture (see 1.2.2). The Chinese influence was strong among the Bikin Udihe and especially the Iman Udihe, for whom Chinese was the language of international communication. The children used to speak Chinese when outside the home, the native language only being spoken within the family. On the other hand, the local Chinese was influenced by the other languages of the area. Compared to standard Chinese, the local Chinese dialect is characterized by a reduced tonal system (two tones instead of four) and a much more limited vocabulary (Elena Perexval'skaja, personal communication).

1.5.1.2. Language contacts

1.5.1.2.1. Lexicon

We do not present here an exhaustive list of Chinese loanwords in Udihe, and further etymologies can be found in Menges (1968). For obvious historical-cultural reasons, Chinese loanwords in Udihe mostly fall into the following semantic groups: agricultural terms (11), household utensils (12), the requirements of modern culture and social life (13), cookery terms (14), kinship terms (15), and others (16). Below the translation of the Chinese word is given only if it differs from that of the Udihe word.

(11)   Udihe   Chinese (Pinyin)
      deuze   'beans'   *dòu-cze*
      tuduze   'potatoes'   *tŭdòu-cze*
      cuŋge   'onion'   *cōng*
      säŋguaza 'melon'   *guā*
      sigua   'watermelon'   *guā*
      gautu   'hoe'   *chátou*
      xuaŋgu   'cucumber'   *huánguā*
      ziŋmi   'rice'   *mĭ*
      sandau   'scythe'   *dāo*   'knife'
      xuaŋmi   'millet'   *huáng* 'yellow' +
                                   mĭ   'rice'
      la:mo: 'mill'   Udihe *la:-* 'grind' +
                                 Chinese *mó* 'grind'

(12)   *jausu*   'key, lock'   *jàoshi*
      zueze   'table'   *zhuōzi*
      deŋe   'lamp'   *dēng*
      co:ŋku   'window'   *cuāngkŏn*
      säŋza   'chest'   *xiāngzi*

ziŋe	'well (noun)'	*jĭng*
baŋza	'board'	*bǎnzi*
cuaŋza	'kettle'	*cháhú*
la:	'candle'	*là*
maŋguana	'pot, frying pan'	*mǎn guàn*	'full jar'
keuzi	'sack'	*kǒu*	'mouth, opening'

(13)

xuece	'train'	*huǒchē*
fuetiŋe	'plane'	*fēijī*
zä:	'money'	*qián*
pöu	'ticket, document'	*piào*
lauzi	'worker, servant'	*láo*	'work, labor'
mäu	'church'	*miào*
laŋgui	'counter'	*guì*	'wardrobe'
guize	'box'	*guì*	'wardrobe'
tieze	'money'	*tiĕ*	'iron'
sänsei	'teacher'	*xiānsheng*

(14)

bouze	'steamed stuffed bun'	*bāozi*
sata	'sugar'	*sa-táng*
säŋza	'stuffing'	*xiāng*	'fragrant, scented'
läŋcei	'cold vegetables'	*lĕng*	'cold' +
		cài	'vegetable'

(15)

susu	'father's younger brother'	*shūshu*
lauje	'maternal grandfather'	*lǎoye*
loulou	'maternal grandmother'	*lǎolǎo*

(16)

xua	'flower'	*huā*
zidi	'purple'	*zĭ*
kuaja	'quick'	*kuài*
dunsi	'thing'	*dōngxī*
sese bi:-	'do one's best'	*xìxīn(de)*	'careful'
ganziŋa	'clean'	*gānjìng*
keje	'language, word'	*kǒuyú*	'oral speech'
xeuze	'monkey'	*hóuzi*
zaŋlaŋa	'cockroach'	*zhangláng*
saŋxua	'lunch, dinner'	*cān*	'food, meal'
mo:go	'mushroom'	*mógu*
gaŋa	'steel'	*gāng*
ce:	'carriage'	*chē*

Chinese components are found in a large number of local toponyms, for example, *dai* (< *dà*) 'big', *si* (< *xī*) 'west', *dun* (< *dōng*) 'east', *si* (< *shí*) 'stone', *bai* (< *bái*) 'white', and *sañ* (< *shān*) 'mountain'.

Interestingly, for certain words lexical "doublets" are found when the original Udihe word co-exists with the Chinese loanword. See the following examples from the Bikin dialect: *xua* 'flower' (< Chinese) and Udihe *ila:* 'flower', *deuze* 'beans' (< Chinese) and Udihe *tuli* 'beans'; *co:ŋku* 'window' (< Chinese) and Udihe *pa:* 'window'. On the other hand, they may be distributed among dialects: cf. Northern *xualibanza* 'chipmunk' (< Chinese) and the native Udihe *etuŋgie* 'chipmunk' in the Southern dialect; *pauza* 'roe' (< Chinese) in the Southern dialect and Udihe *giusa* 'roe', mostly used in the Northern dialect.

According to Menges (1968), certain Chinese words were borrowed into Udihe through Manchu: *puza* 'fire spirit' < Chinese *fó-cze* 'Buddha' through Manchu *pusa*; *xu:ze* 'Manchu robber' < Chinese *hóng-hú-cze* 'red beard' through Manchu *xuŋ-xū-ze*; *koli* 'law, custom' < Chinese *gāo-li* 'high principle' through Manchu *kōli*.

1.5.1.2.2. Grammatical elements

The grammatical elements borrowed from Chinese are:
   Plural suffix *-ziga* from the Chinese *jǐ ge* 'a few' (4.1.2.1);
   additive focus particle *-dA* (12.1.1.3) from the Chinese coordinator *de*;
   restrictive focus particle *m'ei* (12.1.1.9) from the Chinese *mei* 'each, every';
   universal quantifier *teu* (11.2.2.1) from the Chinese *dōu* 'all';
   additive focus particle *xai(si)* (12.1.1.1) from the Chinese *hái* 'still, as usual, yet';
   superlative particle and degree adverb *c'o* (10.1.4.1) from the Chinese *zui*.

1.5.2. Russian

1.5.2.1. Contacts with the Russian people

The Udihe came into close contact with the Russians later than most Siberian peoples. The Udihe homelands were incorporated into Russia in 1860, and only then did Russians begin to appear. Russian peasants started to settle on the seashore sometime after 1883, but this colonization did not much concern the Udihe, who roamed deep in the forests. On the contrary, according to the observations of many travelers of that time, the Udihe attitude towards the Russians was remarkably friendly, since the Russians were displacing the exploitative Chinese traders. The Russian influence on Udihe folk culture was

also weaker than on other Amur peoples. The only Udihe greatly influenced by the Russians at this early date were those living near the sea (the Namunka).

The Udihe were not baptized, as were other Siberian peoples, and they traded with the Russians much less than they did with the Chinese. Russian was little spoken; contact with the Russians was normally in the Chinese-Russian pidgin (Nichols 1980, 1986). Russian was, however, the language of administration.

After the introduction of collective farms in the Soviet period (starting from the late 1930s) the influence of Russian has become more and more traumatic for Udihe language and culture. Its influence was exerted through a system of boarding schools, large multinational settlements, mixed marriages, etc. This led to a drastic deterioration in spiritual culture, reflected in a sharp decline in the number of native speakers of Udihe (see 1.2.3).

1.5.2.2. Language contacts

1.5.2.2.1. Lexicon

Udihe does not allow consonant-final words and tautosyllabic consonant clusters word-initially. Therefore Russian words ending in a consonant are borrowed in Udihe as vowel-final words ending with a vowel *-A* of epenthetic origin. As shown in 3.4.1.2, such a vowel is normally realized phonetically as *a*, see the example in (6a). However, the oldest *n*-final loanwords are borrowed into Udihe as a II-class *n*-final stems (for example, *pisto(n)* from the Russian *piston* 'percussion cap'). Word-initial consonant clusters are either separated by an epenthetic vowel (17b), or exhibit deletion of the first consonant (17c).

(17)		Udihe	Russian	
	a.	*magazin-a*	*magazin*	'shop'
		teatr-a	*teatr*	'theater'
		Iwan-a	*Ivan*	'Ivan'
		ris-a	*ris*	'rice'
		čaj-a	*čaj*	'tea'
		čas-a	*čas*	'hour'
	b.	*xeleb-e*	*xleb*	'bread'
		sumala	*smola*	'resin'
		kirčala-	*kriča-*	'shout'
	c.	*takan-a*	*stakan*	'glass'

The following phonological changes in Russian borrowings are also attested: (i) a change of prevocalic *p* into *f* (18a), as is typical of original Udihe words as well (2.2.3.1); (ii) the replacement of the cluster *pk* (or *fk*) by *kp* (18b) (the

cluster *pk* is prohibited in Udihe (3.2.1)); (iii) the replacement of the long palatalized consonant *šč* and of *č* by *s* (18c).

(18)   Udihe   Russian
   a.   *kanpetka*   *konfetka*   'candy'
   b.   *lakpa*   *lavka*   'shop'
         kakpa   *kapkan*   'trap'
   c.   *jaska*   *jaščik*   'chest, box'
         bosko   *bočka*   'barrel'

Verbs are borrowed in the form of the Infinitive stem of the Russian verb augmented by the Udihe derivational suffix *-lA-* (see 8.1.1.3). This pattern is very productive:

(19)   Udihe   Russian
       zawoni-la-   *zvoni-*   'ring up'
       kopa-la-   *kopa-*   'dig'
       samani-la-   *šamani-*   'shamanize'
       karasi-la-   *krasi-*   'paint'
       rubi-la-   *rubi-*   'cut'
       tancewa-la-   *tancewa-*   'dance'
       nade-le   *nado*   'must'
       zari-la-   *žari-*   'fry'
       (kino) snima-la-   *snima- (kino)* 'shoot (a film)'
       oxota-la-   *oxoti-*   'hunt'

1.5.2.2. Grammar

The modern Udihe use very many Russian words in their speech, and it is not clear whether these should be classified as loanwords or as phonological "quotations" from another language. Russian words are easily combined with Udihe grammatical morphemes. An example of such "macaronical" speech is the following sentence spontaneously produced by one of our informants (*televizor* and *vkluči-* are Russian words for 'television' and 'switch on', respectively):

(20)   *Sikie   televizora   vekluči-la:-mi*   *ei-de*
       evening   television   switch.on-V.PAST-1SG   NEG-FOC
       etete,   timadule   vekluči-la-isi   *ketu aja*   *etete-ini.*
       work   morning   switch.on-V-PC.1SG   very good   work-3SG
       'I switched the television on in the evening and it did not work, in the morning I switched it on (again) and it worked very well.'

However, the influence of Russian on Udihe syntax at the structural level is surprisingly small compared to other minority languages of Siberia and the Russian Far East. The following points can be noted here:

(i) Younger speakers tend to follow the Russian word order. In particular, they place the focus object in a post-verbal position, which violates the major requirement of Udihe word order, namely, the preverbal position of the focus element (24.1.1). In general, the fact that verb-finality in modern Udihe is not rigid (24.1) may be due to the influence of Russian word order. The example below illustrates a non-head-final embedded clause generally disallowed in Udihe but which in this case appeared under Russian influence.

(21)   *Bagdi-mie*   *bagdi-mie*   *sa:-ni*   *namu tagiadi-ni*
       live-INF   live-INF   know-3SG   sea   behind-3SG
       bi:-we-ni   *nada xatala.*
       be.PRP-ACC-3SG   seven girl
       'He lived, lived, and learnt that there were seven girls on the other side of the sea.' (SKX 216)

(ii) Another violation of head-finality that may be due to influence of Russian word order is the postnominal position of proper name apposition (13.8.2) and the postverbal complement subordinate clause (Chapter 20).

(iii) *Wh*-words in Udihe are typically not used as subordinators, since clausal subordination is mostly expressed by non-finite verbal forms; their occasional use in this function, as in (22), is due to the Russian influence:

(22)   *Ali   ami-n(i)*   *eme-gi-si-kce-i-we-ni*
       when   father-3SG   come-REP-MUL-INT.PRP-ACC-3SG
       tu: pala-wasi:-ni.
       all   distract-DIV-3SG
       'When the father was going to come home, she distracted (her son).'

(iv) Certain sentence constructions may be influenced by the corresponding phenomenon in Russian, namely, the desiderative copular clauses with the Dative experiencer NP (17.2.3.2), the Impersonal construction (16.1.3), and the promotion of the nominal patient to the subject position in the Personal Passive clause (16.1.1).

(v) Cases of "semantic translation" from Russian may include the use of the interrogative pronoun *jeu* 'what' in tag questions, as in the meaning 'what for, why' (9.5.1.3), and the adverbial use of the universal quantifier *teu* 'all; all the time, always' (11.2.2.1.3).

(vi) Udihe has borrowed certain functional words from Russian (the conjunctions *i* 'and', *no* 'but', *a* 'and, but', and others) as well as many interjections.

1.5.3. Nanai

The history of the Nanai in the region in question is addressed in Sem (1976: 5–13). The Nanai lived on the banks of the Ussuri as early as the sixteenth century, and it was only as a result of the seventeenth century Manchu invasions that their population decreased. According to Sem, the Nanai appeared on the river Bikin at the end of the nineteenth century, when they moved there from the Ussuri. The Nanai in the Primorje region numbered about 300 people in 1970 (Sem 1976: 10), and spoke the so-called Bikin (or Ussuri) dialect.

The mutual assimilation of Nanai and Udihe as closely related languages is observed on the river Bikin. The variety of Nanai spoken there is influenced by Udihe (or perhaps by local Chinese) on the phonetic level. Compared to other Nanai dialects, it is characterized by the following features: (i) the alveolar affricates /dˤ/ and /c/ instead of the palato-anterior /dˤ/ and /tˤ/, as in Udihe (1.3.2.2); (ii) the monophthongization of diphthongs (cf. the contraction of vowel clusters in Udihe, 3.2.2.2); (iii) the denasalization of nasal vowels; (iv) the deletion of final reduced vowels (cf. 2.1.5.3 for Udihe); (v) the epenthetic vowel that prevents consonant-final words (cf. 3.4.1.2 for Udihe); (vi) the deletion of the intervocalic *w*, as happened in the history of Udihe.

Certain examples of Nanai loanwords in Udihe are:

(i) *dölbo-* 'work' (in the Anyui dialect) from the Nanai *döbo* (cf. Udihe *etete* 'work');

(ii) *merge(n)* 'hero' from the Nanai *merge* (cf. Udihe *jegdige* 'hero');

(iii) the component *-xem* in the compound particle *dexem* which forms indefinite pronouns with a universal meaning, *-dA* is the Udihe focus particle (12.1.1.3) from the Nanai *xem* 'all'

(iv) *banixe* ~ *banäxe* 'thank you' is from the Nanai *banixa:* 'thank you' (cf. Udihe *asasa* 'thank you').

(v) *mä:usa* 'gun' through the Nanai *mioča* 'gun' (cf. the Udihe word *mäunda* 'gun' formed from the same stem as the original Udihe suffix *-nda*) from the Manchu *mjočan* 'gun'.

(vi) the word *daŋsa* 'book' is borrowed from the Chinese *dàn-cze* 'document, list' through the Nanai *daŋsa* 'book' (Cincius 1975–1977: 197).

(vii) The Udihe *xaulie* 'please' seems to be from the Nanai *xawle* 'anyhow, nevertheless'.

1.5.4. Manchu

On the relationship of Udihe with Manchu see 1.4.2. A Manchu origin for some Udihe words was suggested in Menges (1968, 1978: 369).

(23) Udihe

		Manchu	
agba	'state, country'	*alban*	'tribute, service'
baita	'fault'	*bajta*	
zä:	'money'	*ʒixa*	
z'obo	'difficult'	*ʒobo*	
golo	'land, country'	*golo*	'province'
niŋka	'Chinese'	*nikan*	'lackey'
eze	'master, chief, boss'	*eʒen*	< Mongolian
makta	'praise'	*maktā-*	< Mongolian
meŋmu	'silver'	*meŋgun*	< Mongolian
palu-	'exile, banish'	*fa-la-*	'punish (in game)'

1.6. The status of the modern Udihe language

The Udihe language does not have an official status. It is used in everyday oral communication, in particular in family life, but normally only by elderly people. In the settlements Krasnyi Yar, Gwasyugi, and Agzu there exist so-called "national settlement councils" that are supposed to promote native culture and language. However, at present they deal at most with the economic needs of the native peoples.

1.6.1. Sociolinguistic status

As mentioned in 1.2.5, three groups of Udihe (the seashore Udihe, the Khungari Udihe, and practically all the Kur-Urmi Udihe) have been totally assimilated by neighboring peoples. The corresponding dialects are not preserved. The Anyui dialect is likewise almost extinct: in the late 1980s there were about 50 Udihe in the Rassvet settlement on the river Anyui, but some of them derive from those who moved from the river Khor (of the Gwasyugi settlement). Only a few old people remember the Anyui dialect. The Iman group of Udihe (about 100 people altogether) is dispersed among different settlements (see 1.2.5), and in all of them the Udihe are in an absolute minority, while the Russian population prevails. No data is available about the number of speakers of the Iman dialect, but it seems that a further assimilation of the Iman Udihe is inevitable.

At present only three territorial groups of Udihe live in compact groups. The Samarga group is concentrated mainly in the settlement Agzu, where, according to official census data, about 167 Udihe live (about 80% of the population of the settlement). However, most of the Agzu Udihe are not ethnically pure Udihe. According to Perexval'skaja (1994: 81), only about 120 persons (57% of the population of the settlement) represent the Samargian

Udihe ethnically, and among them only a few individuals still know the Samarga dialect. So the prognosis for survival of the Samarga dialect cannot be very optimistic.

The second settlement Gwasyugi includes about 160 Udihe (65% of the population of the settlement) representing the Khor group. This is where the Udihe language is best preserved. Not only the older generation but even the middle-aged normally have a good command of the language. Certain attempts are being made to preserve the language and national traditions, but this is limited to a few traditional branches of folk culture (leather, woodwork, and embroidery), as well as amateur folk art. At present the Gwasyugi settlement is the base of the amateur art group "Gäwa", the best known among the Udihe.

Thirdly, the 400 Udihe living in the neighboring settlements Krasnyi Yar and Olon (55% of the population of the settlements) represent the Bikin group and the Bikin dialect. Some work is in progress to preserve traditional culture, arts and crafts. There is a folklore group, and a museum of the Udihe people. However, the number of speakers of the Bikin dialect is definitely less than those knowing the Khor dialect. Here only a few people over about fifty years old still know the language.

In sum, most Udihe at present consider Russian their first language. In 1979 Russian was spoken fluently by as many as 94.1 % of the Udihe, today this number is close to 100%. In addition, 0.7% of ethnic Udihes speak a third language fluently (typically, Chinese or Nanai), as well as Udihe and Russian. Wherever the Udihe live today, the status of the Udihe language is much lower than that of Russian.

1.6.2. The teaching of Udihe

Schools for children were introduced in the late 1920s, with Russian being the language of instruction. Primary education in the mother tongue began in 1931, when the first school textbooks appeared in the Udihe language (the Khor dialect), compiled by Schneider (see 1.6.3). In 1931 the first Udihe teachers graduated from the Institute of the Northern Peoples in Leningrad. By 1936 the first two classes were supplied with textbooks in the native language, namely, the primary school book (Schneider 1932), the reading book for the first grade translated from Russian (Zulew 1933), the reading book for the second grade (Schneider 1934c), a grammar book for the first two classes (Schneider 1935c), and two arithmetic textbooks in Schneider's translation (Popova 1933, 1934), see also Schneider (1936: 3). Several manuals for teachers of Udihe were also published (Schneider 1934b, 1934c, 1935b).

Further work on textbook preparation was underway, but progress slackened in the late 1930s, as throughout the Soviet Union. In 1938 most of the books

already published were destroyed, the teaching of Udihe in schools came to an end, and Schneider himself was shot.

Since that time there has been no systematic teaching of Udihe, although there have recently been some attempts to introduce it as an optional subject. In the 1980s and early 1990s two courses in Udihe were taught in the kindergarten and primary school of the Agzu settlement, but both were discontinued. In the settlement Krasnyi Yar Udihe is still taught from time to time, but in an unsystematic way.

Some new teaching materials were recently created for the Bikin Udihe by Perexval'skaja as part of the "Udihe School" project sponsored by the Cultural Initiative Foundation (see Perexval'skaja 1989). These books, using a Cyrillic-based orthography, are designed for the kindergarten (Perexval'skaja and Tol'skaja 1991), and for the first grade (Perexval'skaja 1991a, 1991b, 1991c, 1991d). Unfortunately, a shortage of professional teachers means that they are only occasionally used.

In 1999 a publishing house in Khabarovsk published a primary school primer compiled in the Northern dialect by Valentina Kjalundzjuga (Kjalundzjuga 1999). This book uses the official Udihe orthography suggested by Simonov (see 1.6.3). Hopefully, the publication of this book will stimulate the interest in teaching and studying Udihe in schools. At the present stage, however, the prospects do not look very promising.

1.6.3. Orthography

The first Udihe orthography was compiled by Schneider in the 1920s on the basis of the Latin alphabet, and was used in several of Schneider's publications of school books (Schneider 1932, 1934a, 1934b, 1934c, 1935b), in reading books translated from Russian (Kulagin 1934; Čarušin 1935), in collections of Udihe tales (Schneider 1935a), and in a dictionary (Schneider 1936). Schneider's orthography was designed for the Northern dialect of Udihe. It was based on experimental phonetic work and the study of Udihe phonology (see 1.7.3), and seems to reflect the Udihe phonological system quite effectively. The orthography used the standard Latin alphabet with some additional symbols: schwa for the mid vowel (which we transcribe here as *e*), *η* for the uvular sonant, *æ* for the low front vowel (*ä*), *ө* for mid front round vowel (*ö*), and *ʒ* for the voiced affricate. The letter *y* was used for the high round front vowel (*ü*), the symbol ' denoted laryngealization (the glottal stop), and vowel length was denoted by a horizontal stroke over the letter.

In 1938, as for the other minority languages of the USSR, the orthography based on Latin was transformed into one based on Cyrillic. Only one mathematics textbook was published in the new Cyrillic version, although it is no longer extant. The Cyrillic orthography of Schneider was used by the Udihe

writer Džansi Kimonko for his book *Where the Sukpai flows* written in the 1940s (Kimonko 1956) and translated from Udihe into Russian. His Cyrillic manuscript is still preserved.

There was another attempt to create a Udihe alphabet in the early 1980s. A Cyrillic transcription elaborated by Mixail Simonov, based on an experimental study of the Khor dialect (see Simonov 1988), was recognized in 1989 by the Khabarovsk authorities as the official orthography of Northern Udihe. This transcription was used in the large edition of Udihe folklore (Simonov, Kjalundzjuga, and Xasanova 1998) and the Udihe-Russian dictionary (Simonov and Kjalundzjuga 1998–1999). Simonov (1988) has rather greatly reinterpreted the system of vowels (see Chapters 2–3), and this is also reflected in his transcription and orthography. One formal difference between this orthography and other Cyrillic-based transcriptions lies in the notation for the pharyngealized (or: "intensive tense", in Simonov's terms) vowels typical of the Khor dialect (1.3.2.1): Schneider renders them with the symbol *h*, whereas Simonov uses circumflex-like diacritics. Simonov also records an *e* instead of Schneider's schwa (as we do here) and does not recognize the vowels *ü*, *ä*, and *ö* as independent phonemes. Unfortunately, this orthography does not always indicate long vowels and vowels with the complex phonation type (laryngealized and pharyngealized).

An alternative Cyrillic-based Udihe orthography was created by Perexval'skaja for the dialect of Bikin as part of the project *The Udihe School* (1989–1993). It was accepted as the official orthography for the Southern Udihe by the Association of the Native Peoples of the Primorje Region in 1990, and is used in several schoolbooks and folklore editions (1.6.2). It basically goes back to Schneider's orthography, except that the author tries to follow Russian orthographic norms to make it easier for those Udihe children who can already read Russian. So vowel length is rendered not by a horizontal stroke but by an accent ("grave") in the same way as Russian stress, and the vowels *ü*, *ä*, and *ö* are rendered by the Russian "joticized" letters *ю*, *я*, and *ё* respectively.

Samples of various orthographies and transcriptions are presented in Chapter 25.

1.6.4. Literature

The only known professional Udihe writer was Schneider's student Džansi Kimonko (1905–1949). His book, *Where the Sukpai Flows*, written in the Udihe language, was translated and published in Russian (Kimonko 1956). Kimonko also produced some poetry in Udihe (Kimonko 1955; Simonov, Kjalundzjuga, and Xasanova 1998). The Khor Udihe Valentina Kjalunzjuga and the Nanai Nikolaj Dunkaj have taken part in collecting and recording

samples of folklore (Dunkaj 1961; Kjalundzjuga 1974; Simonov, Kjalundzjuga, and Xasanova 1998).

1.7. The study of Udihe

Although the Udihe are rather well described from an anthropological point of view (1.7.1), the Udihe language is perhaps the least studied of the Tungus languages. So far it lacks a comprehensive grammatical description and a dictionary exists only for the Khor dialect. The linguistic study of the Udihe language is addressed in 1.7.2 and 1.7.3.

1.7.1. Short survey of ethnographic work

The earliest information about the Udihe can be found in the 1850s in the works of occasional travelers and geographers such as Bošnjak, Nadarov, Maksimov, and others (see Krušanov 1989: 8–9 for a survey of the oldest sources on the Udihe). In the 1850s the ethnographer Schrenk conducted extensive work among the Tungus people of the Amur and Primorje regions (Schrenk 1883–1903). He produced the first classification of the Tungus people and languages. Sternberg was working on various Tungus people of the Far East, including the Oroch (1933), but did not write about the Udihe in particular. In the nineteenth century the Udihe were not generally distinguished from the Oroch.

Only towards the end of the century did Margaritov (1988), and especially Brailovskij (1901), who conducted the 1897 census, distinguish the southern group of Udihe from the Oroch. The River Botch was suggested as a boundary. Brailovskij (1901) created the first complete anthropological description of the Udihe, and was the first to use the term Udihe instead of Oroch or Orochon.

Although the use of the term "Udihe" was criticized, for example by the influential ethnographer Patkanov (1906) who proposed the term Kekar (see 1.2.2), the ethnonym Udihe was advocated by Vladimir Arsen'ev, the foremost specialist on Udihe culture. In 1916 he published a comparative work about the Udihe and the Oroch in which he showed that their cultures were significantly different (Arsen'ev 1916). This work also contains some linguistic comparisons between Udihe and Oroch. Arsen'ev, who spent many years among the Udihe in the first years of the twentieth century, collected much valuable information about the Udihe, as is reflected in his works, especially his book *The Forest People Udihe* (Arsen'ev 1948). But he had not completed a substantial study. Although most of Arsen'ev's materials are still unpublished, some appear in Simonov, Kjalundzjuga, and Xasanova (1998), together with an article on his work (see also the references therein). Arsen'ev's materials were used by Fridrich Albert in his ethnographical description of the Udihe (Albert 1956), in

combination with his own field materials dating from the beginning of the century.

In the second half of the twentieth century several different aspects of Udihe anthropology were studied. The most important works (those containing a representative bibliography) are the following: those of Starcev, dealing with history, material and non-material culture (Starcev 1996), those of Podmaskin on popular beliefs and customs (Podmaskin 1977, 1991), and the works of Smoljak on ethnogenesis and traditional culture (Smoljak 1980, 1984). Decorative art is studied in Bukatova (1972) and Osokina (1981), while musical culture and folklore are dealt with in Šejkin (1982a, 1982b) and Podmaskin (1987). Comprehensive ethnographic monographs on the Udihe are Lar'kin (1958), Krušanov (1989), and Perexval'skaja (1994).

It should be noticed that all the anthropological works contained a few Udihe words written in Russian (or Latin) transliteration. Only Arsen'ev tried to add additional symbols to render those Udihe sounds that did not exist in Russian (Arsen'ev 1926), although he was not consistent in this.

More detailed information on ethnographic work concerning the Udihe can be found in Simonov, Kjalundzjuga, and Xasanova (1998).

1.7.2. Nineteenth and early twentieth century dictionaries

During the nineteenth century practically nothing was written about the grammar of Udihe. The first attestations of the language date from the late nineteenth century and are of a lexicographical character. The following dictionaries and wordlists are the best known. The dictionary of Nadarov (1887), which contains about 250 words, appeared as a supplement to his ethnographic works. The Oroch dictionaries that include some Udihe material are those of the missionary Protod'jakonov (1888), which has about 1000 words, the dictionary of Margaritov (1888), which has about 400 words, and the dictionary of Leontovič (1896), which has about 2500 words. The most complete Udihe dictionary was that compiled by Brailovskij (1901), which contains about 1000 words placed alongside already published material about Oroch. The dictionary by Schmidt (1927) contains about 1000 Udihe and Oroch words. For further details see Simonov, Kjalundzjuga, and Xasanova (1998: 14–16).

1.7.3. Twentieth century linguistic work

Extensive linguistic work on Udihe was started by Schneider in the 1920s, who was also involved in developing school teaching and creating textbooks (see 1.6.2, 1.6.3). Schneider was the first to prepare a grammatical description of

Udihe, published as a supplement to his dictionary of the Khor dialect (Schneider 1936). The dictionary contains about 4200 words. Information on grammar is included in his books for teachers (Schneider 1934b, 1935b). A phonological description of the Anyui dialect supplemented by texts was published in 1937 but is only preserved in a few copies (Schneider 1937).

The phonological description made by Schneider was based on experimental phonetic work conducted in Leningrad with the participation of the experimental phoneticians Zinder, Matusevič, and Ščerba (see Schneider 1936; Kormušin 1998). This work, concentrating on the Khor dialect, revealed for the first time the presence of laryngeal and pharyngeal segments in Udihe. They were considered special types of vowels (see 2.2.2.3.2). The results of the experimental work were generalized in an unpublished manuscript of Zinder and Matusevič "The Phonetics of the Udihe Language", and were also used by one of these authors in a book on general phonetics (Zinder 1960). They are also a basis for the orthography developed by Schneider (1.6.3).

The phonological ideas and the transcription of Schneider were used by his student Elena Baskakova, who recorded folklore while working in Anyui and Samarga. Since she also was arrested in 1930s, the materials remained unpublished and preserved in the archives (some of them are published in Simonov, Kjalundzjuga, and Xasanova 1998). Since that time the same transcription has been used in all works on the comparative grammar of the Tungus languages, sometimes transliterated on a Cyrillic basis (Cincius 1949, 1975–1977; Novikova 1961, and others) or remaining in a transcription based on the Latin alphabet (e.g. Benzing 1956).

In the second half of the twentieth century Sunik conducted his own fieldwork among the Khor Udihe, which resulted in several short grammatical descriptions (Sunik 1958, 1968, 1997). He also used Udihe materials in his work on the comparative grammar of the Tungus languages (Sunik 1947, 1962, 1982). In respect of phonology, Sunik suggested three major modifications to the system of Schneider: (i) he treated Schneider's diphthongs, long vowels and pharyngealized and laryngealized vowels as biphonemic complexes; (ii) he introduced the opposition front-back for the high vowels: /i/ and /ï/, /u/ and /ü/, whereas in Schneider's description only /i/ and /u/ were present; (iii) he gave up treating long vowels as separate phonemes. On our interpretation of the vocalic system see 2.1.

The phonological approach of Sunik was developed in Kormušin (1998), where it was also motivated from a historical point of view; however, certain ideas (for example, concerning the non-phonemic status of long vowels) were rejected. See Chapters 2–3 for further detail.

Other linguistic works that deal specifically with Udihe are those of Girfanova on various questions of Udihe grammar and phonetics (Girfanova 1984, 1985; Atknin and Girfanova 1985) and specifically on verbal morphology (Girfanova 1988). Simonov (1988) suggested a new phonological

description that differed considerably from the conceptions of Schneider, Sunik, and Kormušin. His study is based on experimental phonetic work on the Khor dialect carried out in cooperation with Radčenko (see also Radčenko 1987, 1988). In recent years Simonov together with Valentina Kjalundzjuga, a Khor Udihe, and other colleagues published a large volume of Udihe folklore with ethnographic and folkloristic comments (Simonov, Kjalundzjuga, and Xasanova 1998) and a comprehensive three volumes Udihe-Russian dictionary of the Khor dialect (Simonov and Kjalundzjuga 1998). The dictionary additionally provides basic grammatical information. Other experimental-phonetic studies are Baicura (1978–9, 1989–91). The historical grammar of Udihe is quite poorly studied, exceptions being Menges (1968), Cincius (1949), and Kormušin (1998).

Phonology

The phonology of Udihe is fairly typical of a language representative of the Uralo-Altaic language area. The phonemic system is characterized by the following features: voicing opposition for labial, dental and velar stops, and for the affricates, velar spirant *x*, palatalized *ñ*, glides *w* and *j*, velar *ŋ*, and an eight member vowel system. The vibrant *r* is highly marginal. Vowels have long and short counterparts. A peculiarity of Udihe phonology is that it exhibits a special class of "laryngealized" vowels phonologically opposed to regular vowels, which go back to the glottal stop and ultimately to the intervocalic **k*. As distinct from regular short vowels, long and laryngealized vowels are associated with two moras and typically bear word stress. Vowel harmony is based on both height and rounding distinctions. High vowels are harmony-neutral.

An important syllabic constraint of Udihe is that it does not allow tautosyllabic consonantal clusters. Thus, clusters on word edges as well as three-consonantal clusters are ruled out. On the other hand, vocalic clusters, including those that have three vowels, are fairly frequent. In two-consonantal medial clusters, stops and affricates agree in voicing. Vocalic epenthesis prevents illegitimate consonantal clusters, as well as word-final consonants.

The stress is quantity-sensitive and falls on the most right bimoraic vowel or, in the absence of bimoraic vowels, on the most right vowel in the word. In affixes, word-final high vowels are extrametrical with respect to stress.

Chapter 2
Segmental phonology

The transcription used in this book is based on IPA, with the amendments described below. Certain conventions regarding the transcription of the allophonic variants accepted in this grammar are discussed in the appropriate sections.

2.1. Vowels

2.1.1. Inventory

The vowel inventory of the modern Southern dialects consists of 25 phonemes. The following types of vowels are phonologically opposed: short vowels (2.1.1.1), long vowels (2.1.1.2), and laryngealized vowels (2.1.1.3). The diphthongs mentioned by Schneider (1936) are treated here as biphonemic vowel clusters (see 3.2.2.2).

2.1.1.1. Short vowels

2.1.1.1.1. The system of short vowels

The system of short vowels includes eight vowels.

Table 3. Short vowels

	front		central	back
	non-rounded	rounded	non-rounded	rounded
high	*i*	*ü*		*u*
mid		*ö*	*e*	*o*
low	*ä*		*a*	

The symbols *ä*, *ö*, and *ü* are here used for IPA æ, ø, and y, respectively. The vowel denoted here as *e* corresponds to schwa in the transcription of Schneider and Perexval'skaja (1989 and other works) and to ə in the Cyrillic-based transcription of Sunik (1968, 1997), Simonov (1988), and Kormušin (1998). As follows from the table above, it is a central non-rounded mid vowel, so its transcription as schwa is phonetically accurate. We choose to denote it as *e*

because this has been traditional among most authors dealing with the Udihe material, and it is convenient for technical reasons. On the phonetic realization of /e/, see 2.1.4.1.

The phoneme /ü/ is not recognized as such by Schneider, Sunik (1968, 1997), or Simonov (1988), although according to Schneider the vowel /ü/ can be found within the diphthongs *üi* and *üö* (Schneider 1936: 84). Kormušin notes that /ü/ is infrequent and only occurs word-medially (Kormušin 1998: 13–14). In most cases /ü/ is followed by another vowel, as in *üi* and *üö*. Since Kormušin and this grammar treat vocalic clusters not as diphthongs but as biphonemic combinations of vowels (3.2.2.2), /ü/ must be regarded as a separate phoneme. In the Bikin dialect there are certain words in which /ü/ occurs outside of vocalic clusters, for example: *bogüso-* 'torture', *kuizü* 'box, chest', *lü-lü* 'through (get wet)', *süŋmu* 'dragon', *sükpou* 'a sharp stick for taking meat', *tülo-* 'get dirty', *düce* 'Chinese garlic', *solügi* 'orange', *solümi* 'dried fish'. For this reason it is assigned a phonemic status, although it is indeed marginal in the system of short vowels. In idiolects /ü/ may be replaced by /i/: *solügi ~ soligi* 'orange', *sükpou ~ sikpou* 'a sharp stick for taking meat'.

The phoneme /ö/ is also infrequent, but it occurs more often than /ü/. Cf. the following minimal pairs:

(24)   *oloŋko*   'ford'   *oloŋkö*   'oak-tree'
       sogdo   'steam'   *sogdö*   'back'

2.1.1.1.2. Front mid vowel?

As mentioned in 2.1.1.1, the vowel here denoted as /e/ is a mid vowel with central pronunciation. Other authors also mention a front mid non-rounded vowel, denoted as *e* in Schneider (1936), Sunik (1968, 1997), and Kormušin (1998). Schneider actually discusses two short front mid vowels (/e/ and /ie/) and their long counterparts (/e:/ and /ie:/). Schneider's /e/ and short /ie/, on the one hand, and the /e:/ and 'long' /ie:/, on the other, are each treated by Kormušin as a single phoneme. He shows that they do not contrast phonologically, and are close phonetically (Kormušin 1998: 14–15). So Kormušin's description includes short and long front mid vowels (*e* and *e:*) as well as the mid central short and long vowels.

In our opinion, there is no reason to assign a phonemic status to the front mid vowels. They are not opposed phonologically to other phonemes already present in the system, namely the front low vowel /ä/ and the diphthongoid /ie/, respectively.

The short front mid vowel is, according to Schneider, infrequent. He recorded it in certain words where it precedes /u/: *geu* 'oar', *Geuŋka* 'clan name', and *geuka* 'snag', and also in several words where it precedes /ä/, such as *ameä* 'back' (and its numerous derivatives), *beä* 'month', *b'eäsa* 'river', and

Duleä 'middle brother' (in his transcription). In the first case we have transcribed the cluster recorded by Schneider as *eu* with the notation *äu*, for example, *gäu* 'oar'. It may also correspond to *io*, cf. *Gioŋka* 'clan name'. Likewise, the cluster which Schneider recorded as *eä* appears to us, in the modern language at any rate, to be a long */ä:/* (*bä:* 'month', *amä:* 'back'). This can undergo secondary shortening, as in *bäsa* 'river' (see 2.1.1.2.3). In fact, Schneider himself treated the complex *eä* as a long vowel (not a diphthong), see Schneider (1936: 83).

Kormušin notices that the front mid vowel occurs only word-medially and word-finally (Kormušin 1998: 12). In the latter case it normally has a diphthongoid pronunciation (*ie*). In fact, in this case it is rather long, and develops as a result of expressive lengthening (2.1.5.2). It can be considered a diphthongoid */ie/* (2.1.1.2.1). Kormušin also cites two words where, according to him, the short word-medial *e* developed from */i/*, but both are absent from the Bikin dialect. So there is no evidence for the presence of the short *e*, at least in the Bikin dialect. Within the vowel clusters it is not distinguished from */ä/*, while when it appears word-finally it rather represents */ie/*.

As for the potential long */e:/*, although Schneider cites it as a vowel phoneme it is not found in his dictionary (Schneider 1936). In all the cases where Kormušin has used */e:/* we have found the pronunciation to be closer to the diphthongoid */ie/*, and it is so recorded in our transcription: for example, *tie* 'pair' is used for Kormušin's *te:*, and *dieli-* 'fly' for Kormušin's *de:li-*. Kormušin himself notes that */ie/* and */e:/* are positional variations of one long phoneme (Kormušin 1998: 15).

Thus, in our transcription Kormušin's */e/* will be recorded as */ä/*, while */e:/*, which is mostly pronounced as a diphthongoid, will be recorded as */ie/*.

2.1.1.2. Long vowels

2.1.1.2.1. The system of long vowels

Every short vowel has a long correlate, as in the table below; however, the long phoneme */ie/* does not have a short counterpart (see 2.1.1.1.1).

Table 4. Long vowels

	front		central	back
	non-rounded	rounded	non-rounded	rounded
high	*i:*	*ü:*		*u:*
mid	*ie*	*ö:*	*e:*	*o:*
low	*ä:*		*a:*	

The long vowel */ü:/*, like its short correlate */ü/*, is found in only a few words, such as *kü:* 'honey', *sü:* 'one year old boar', and *zü:-* 'grind'. The front mid

long vowel is denoted as /ie/ to distinguish it from the central mid long vowel /e:/, and it does indeed have a diphthongoid pronunciation, see 2.1.1.2.2.

According to the experimental data, the long vowels are approximately 1.5 times as long as the short vowels (Radčenko 1988: 38), but they are pronounced slightly shorter in closed syllables. In his early work Sunik (1968) did not recognize long vowels and treated them as biphonemic complexes; see the criticism of this view in Kormušin (1998) and Simonov (1988: 54). Yet, in spite of the tendency for shortening (2.1.1.2.3), long vowels are present as independent phonological units, cf. the following minimal and quasi-minimal pairs that show the phonemic status of the long vowels:

(25)	*etete-mi*	'I work'	*etete:-mi*	'I worked'
	dili	'head'	*dili:*	'my head (1SG)'
	ede	'become'	*e:de*	'blunt'
	Ima	'river Iman'	*ima:*	'snow'
	umu	'belt'	*u:mu*	'pile'
	olo	'here'	*olo:*	'boiled fish'
	bölo	'knee'	*mö:-lo*	'neck (LOC)'

The stress placing rules (see 3.6.3.2) also clearly indicate that these are bimoraic vowel phonemes.

2.1.1.2.2. Diphthongoids

The long vowel /ie/ is in all environments pronounced as diphthongoid. It often appears as a result of the contraction of the short vowels /i/ and /e/ in the course of morphological derivation, for example, *umi-* 'drink' + *e* (PAST) → *umie-*. The long vowel /ö:/ may often have a diphthongoid pronunciation *üö*, and was recorded by Schneider as a diphthong in certain cases, for example, *mö:* 'neck' (< *müö*). The vowel /ä:/, although normally going back to the diphthong *iä*, and recorded as a diphthong in Simonov (1988), seems to have lost the glide component in the modern Bikin dialect, and is pronounced as a monophthongoid. A word-initial /o:/ may be diphthongized and pronounced as ᵘ*o*. In a similar way, the initial /i:/ has a *j*-like component: ʲ*i:* (cf. 2.1.4.3).

2.1.1.2.3. Shortening

There is a clear tendency for long vowels to shorten. This tendency is reflected in free and idiolectal pronunciation variations, for example: *abdä:* and *abdä* 'leaf'. In some cases our records provide evidence of the process of vowel shortening. Schneider recorded a long vowel in the first syllable of the word *bä:sa* 'river', whereas the common modern pronunciation is for the first vowel

to be pronounced short, resulting in *bäsa*. This among other factors is indicated by the stress in that word, which now falls on the second syllable (if the first syllable were long, then it would bear the stress, see 3.6.3.2). Word-final long vowels that appear as a result of the contraction of two short vowels in the course of morphological derivation are regularly shortened in fast speech (2.1.5.3).

The long vowels that are found within grammatical morphemes do not typically shorten (for example, the long vowel that denotes the Past tense in the verb). However, the long /i:/ that developed as a contraction of two short vowels /i/ at the boundary of the *i*-final verbal stem and the 3rd Singular Present tense affix often undergoes shortening: *igbe-si:-ti* (< *igbe-si-iti* <bath-IM-3PL>) 'they are bathing' → *igbe-si-ti; eme-gi:-ni* (< *eme-gi-ini* <come-REP-3SG>) → *eme-gi-ni* 'he is coming'. The long vowels that appeared by prosodic lengthening (2.3.4) do not shorten either.

2.1.1.3. Laryngealized vowels

Udihe possesses a special class of laryngealized vowels that are phonologically opposed to simple vowels. Laryngealization (or "creaky voice") is here a compound phonation type, characterized by complex articulation: one part of the glottis vibrates and produces voicing, while another part produces a creak.

Laryngealization causes a slight change in vowel quality. When laryngealized, non-front vowels tend to undergo partial fronting: /'a/ is almost identical phonetically to ['ä], /'o/ to ['ö], and /e/ to ['e] (recall that the non-laryngealized /e/ is a central vowel). This is confirmed by a preliminary instrumental-phonetic study of these vowels, according to which they show the consistent raising of the second formant compared to their non-laryngealized counterparts. Laryngealized vowels have a greater intensity and duration than short vowels and are phonologically bimoraic, as is indicated by the facts of stress placement (see 3.6.3.2).

Janhunen (1999) has suggested that the distinction between various phonation types in Udihe may be suprasegmental in nature. Four types of (Northern) Udihe vowels (short, long, laryngealized, and pharyngealized) may be characterized by four distinctive tones, which emerged under the influence of Chinese. This suggestion needs further investigation and will not be pursued here.

2.1.1.3.1. The system of the laryngealized vowels

Every non-high short vowel has a phonemic laryngealized counterpart. Laryngealization is denoted by an apostrophe before the corresponding vowel, for example: *'ana* 'boat', *tuk'ä* 'run (PERF)', *d'ofo* 'inside', *in'ei* 'dog'. The

laryngealized vowel can precede another vowel, which is called a "laryngealized diphthong" in Schneider (1936), cf.: *ñ'au* 'hen', *ku'ai* 'ear', *g'ai* 'crow'. The high vowels /i/, /u/ and /ü/ never laryngealize, and neither does the diphthongoid long vowel /ie/. We also failed to find examples in which the vowel /ö/ was laryngealized.

The inventory of laryngealized vowels is as follows:

Table 5. Laryngealized vowels

	front		central	back
	non-rounded	rounded	non-rounded	rounded
high				
mid			*'e*	*'o*
low	*'ä*		*'a*	

The minimal and quasi-minimal pairs that show the phonological contrast between non-laryngealized and laryngealized vowels are presented below.

(26)	*bono-ini*	'hail (3SG)'	*b'ono-ini*	'catch up (3SG)'
	bula	'flat cake'	*bul'a*	'young ash-tree'
	kua-i	'plane, shave (2SG)'	*ku'ai*	'ear'
	kolo	'beetle'	*k'olo*	'mittens'

The phonological contrast between laryngealized and non-laryngealized vowels is clearly seen in the opposition between the bare Present verbal stem and the 3rd person Perfect form, since laryngealization of a stem-final non-high vowel is a marker of the Perfect tense (7.1.3.2):

(27)	Present stem	Perfect	
	bunde	*bund'e*	'add'
	tukä	*tuk'ä*	'run'
	zawa	*zaw'a*	'take'
	oŋmo	*oŋm'o*	'forget'

It should be noticed that in the pronunciation of some speakers, especially those from the youngest generation, laryngealization is practically absent; non-laryngealized vowels are pronounced instead.

2.1.1.3.2. The phonological status of laryngealization

There are two approaches in the literature to laryngealization in Udihe (the Northern dialect). First, the laryngealization was treated as additional phonation on the vowel. This conception was initiated by Schneider with respect to the Khor dialect. According to Schneider and his experimental data, laryngealized vowels (*preryvistye*, that is, 'interrupted' in his terms) are

pronounced with the glottal stop in the middle of the vowel duration, that is, for example, /'a/ is interpreted as [a'a] phonetically. As a result, the pronunciation of the vowel is interrupted by a moment of a complete silence (Schneider 1936: 85). According to the experimental data of Zinder and Matusevitch (see Kormušin 1998: 20), the place of the articulation of the stop can vary among individual speakers without being opposed phonologically: it can be either a voiceless glottal stop or a voiced pharyngeal stop. The length of the vowel after the stop is approximately four time greater than the length of the vowel before the stop.

In a similar fashion, laryngealization is regarded as an additional suprasegmental feature of the vowel in Simonov (1988). In his conception, laryngealized vowels are called 'weakly-intensive interrupted' vowels (*slabo-intensivnye otryvistye*) and are characterized not by the glottal stop as such, but by a special articulation, namely, a change in the state of the pharynx: from tensed to not tensed. Such an articulation can be optionally accompanied by the glottal stop, especially in emphatic pronunciation. Simonov's conclusion is based on the experimental phonetic data of Radčenko (see Simonov 1988: 53; Radčenko 1988). According to this data, the glottal laryngeal (as well as the pharyngeal /h/ as present in the Northern dialect, see 1.3.2.1) can be of two types: in some cases it represents additional phonation of the vowel, while in other cases it can indeed correspond to a separate consonant phoneme (the glottal stop or laryngeal fricative). This later conclusion, although it may follow from the experimental data, is not supported by any purely phonological considerations.

On the other hand, certain scholars who studied the Northern dialect considered laryngealization as a realization of a separate consonant phoneme, a glottal stop. Similarly, pharyngealization in the Northern dialect was viewed as the separate consonant phoneme /h/. The glottal stop /ʔ/ and the pharyngeal /h/ as consonants are mentioned in Sunik (1968: 212, 1997) without any particular argumentation. According to this author, the glottal stop and the pharyngeal occur between two vowel phonemes of the same quality: *a'a* and *aha*. Kormušin (1998: 19–27) discusses this question in great detail. His conclusion on the consonantal character of the glottal stop is based mostly on its historical origin: the glottal stop /ʔ/ goes back to the intervocalic **k* after the non-high vowels /o/, /a/ and /e/ (Cincius 1949b: 218–227). The complex *a'a* (or *'a* in the transcription of Schneider and in our transcription) is transcribed by Kormušin as *a'*, that is, as a vowel followed by a glottal stop consonant. He also notices that the phenomenon Schneider described as an insertion of the glottal stop in the middle of the vowel is in fact the result of the inertial lengthening of the vowel followed by the glottal stop. It appears because the glottal stop cannot immediately be followed by a consonant for reasons of articulation.

As follows from 2.1.1.3, we share the first opinion, that is, we treat laryngealization as an additional feature of the corresponding vowel and not as a separate consonantal phoneme, at least for the modern Bikin dialect. Indeed

laryngealization goes back to the consonant *-k-, and it is not excluded that in the recent past (and perhaps in the modern Northern dialect as well) it was the consonantal glottal stop. However, historical origin cannot be an argument for phonemic status in the modern language, as Kormušin proposed. Our conclusion is rather based on the data of phonemic distribution. Although individually none of the arguments presented below prevents the treatment of the laryngeal as a consonantal element, in concert they considerably weaken such a hypothesis.

(i) The laryngealized vowel occurs in word-final position, for example: *tal'a* 'meal made of raw fish', *gel'e* 'he asked (PERF)', *od'o* 'grandfather', etc. If it is considered a consonant, as suggested in Kormušin (1998), the corresponding words should be re-interpreted as consonant-final (for example, *odo'*) which contradicts the major phonotactic property of Udihe (3.1.1).

(ii) Similarly, if the glottal stop is regarded as a consonantal phoneme, this would mean that in certain cases three-consonantal clusters are present: *ba'gdi* (instead of *b'agdi* in our transcription) 'meet', *ta'pti* (instead of *t'apti* in our transcription) 'clay', *xaña'ŋku* (instead of *xañ'aŋku* in our transcription) 'mirror', etc. However, three-consonantal clusters are not otherwise possible in Udihe (3.2.1).

(iii) According to Kormušin, the glottal stop follows the vowel, as conditioned by its historical origin from an intervocalic *-k-. This means that it never occurs word-initially, although other consonants do.

(iv) The laryngeal opposition is limited to non-high vowels. If laryngealization were treated as a consonant, the fact that it never follows the vowels /i/, /u/, and /ü/ would require some additional explanation.

(v) As Schneider had already pointed out (cf. also Simonov 1988: 53–54), the criterion for the mono-phonematicity of the laryngealized vowels is that they cannot belong to two different syllables. Thus, in the complex [a'a], the element 'a cannot constitute a separate syllable, as would be expected if the glottal stop were a separate consonant phoneme.

(vi) Finally, and most importantly, the laryngealized vowels behave as if they were bimoraic with respect to stress assignment, that is, they bear the primary stress (3.6.3.2). As argued in 3.6.2, coda consonants do not provide a mora in Udihe. If the laryngeal were a consonant it would be in a coda position in the syllable and would not project a mora. Therefore the attested stress pattern would remain unexplained.

The phonetic quality of laryngealized segments in the modern Bikin dialect also seems to suggest that we are here dealing with a special phonation type of the vowel rather than with the complex "a vowel + glottal stop". Although experimental study of the Bikin dialect has not been conducted, the auditory perception favors such an analysis. According to native speakers of the Bikin dialect, words with laryngealized elements are pronounced "differently" in their language compared to the language of the Khor and Samarga dialect. This might indicate that in the Northern dialect the glottal stop can indeed be

realized phonetically as a consonantal element, while in the Bikin dialect it is realized as a vowel phonation. But even for the Northern dialect Kormušin himself mentions that in swift speech the glottal stop is hardly present (Kormušin 1998: 24). Its presence is only noticeable by the laryngealized character of the preceding vowel. The glottal stop as such is only possible in slow speech when a speaker makes a deliberate attempt to highlight it.

2.1.2. Some remarks on the history of vowels

As discussed in Kormušin (1998), there are "primary" and "secondary" class vowels (*osnovnye* and *neosnovnye* in his terms). The primary vowels /a/, /o/, /e/, /i/, and /u/ normally go back to the corresponding Proto-Tungus vowels (*a, *o, *e, *i, and *u, respectively). The primary vowels lack positional constraints, and appear more frequently than the secondary vowels /ü/, /ä/, and /ö/. The latter usually developed as a result of *Umlaut*-like changes in the quality of the primary vowel under the influence of the vowels in the following syllable (for example, *ä* < *i, *a, etc.).

In most cases the original Proto-Tungus long vowels merged with the short vowels in Udihe (Cincius 1949b: 95–110; Menges 1968; Kormušin 1998: 5). In other words, the long vowels that underwent shortening serve as another historical source of both secondary and primary short vowels. Most of the long vowels present in the modern language are of secondary origin. The sources of secondary vowel length are as follows:

(i) the so-called "prosodic lengthening" of monosyllabic words (see 2.3.4);

(ii) in the Bikin dialect, the contraction that occurs with the pharyngeal /h/ (see 1.3.2.1);

(iii) historical contractions with other intervocalic consonants, such as /r/, /g/, /j/, /w/, for example: *ga:* < *gara* 'bough', *xu:* < *xuwu* 'saw', *zo:-* < *zogo-* 'need';

(iv) the synchronic contraction of two identical vowels (2.3.1).

2.1.3. Allophonic variations

The short vowels /a/ and /o/ regularly change into /e/ (phonetically, a schwa) before the high vowels /i/ and /u/, that is, within the vowel clusters, for example:

(28)	*zaŋta*	'arrow'	→	*zaŋta-i* [*zaŋtei*]	'my arrow'
				zaŋta-u [*zaŋte-u*]	'your (PL) arrow'
	oto	'plate'	→	*oto-i* [*ote-i*]	'my plate'
				oto-u [*ote-u*]	'your (PL) plate'

This change is not reflected in the transcription used in this grammar.

The change of /a/ and /o/ into /e/ before the high vowels only seems to take place in syllables other than the first; in the first syllable itself the original clusters *ai, oi, au,* and *ou,* are preserved, for example: *aisi* 'gold', *daumi* 'tobacco', *pou-pou* 'dark'.

Less regularly, the vowels /a/ and /o/ are pronounced as /e/ when they follow the glide /j/. This happens, for example, in the 2nd Singular Imperative morpheme *-jA*: *ana-ja ~ ana-je* 'push (IMP.2SG)', *daga-ja ~ daga-je* 'burn (IMP.2SG)', *oño-jo ~ oño-je* 'write (IMP.2SG)'. Infrequently the vowel preceding /j/ is also pronounced as /e/, for example: *zima-ja ~ zima-je ~ zime-je* 'come to visit (IMP.2SG)'.

2.1.4. Free variations

2.1.4.1. The pronunciation of /e/

The phonetic realization of the vowel /e/ is normally influenced by the quality of the other vowels within the word. When co-occurring with high vowels, the vowel /e/ is pronounced as the narrower vowel *i*, for example: *zile* [zɪlɪ] 'anvil', *neptige* 'cartilage' [nɪptɪgɪ], etc. When /e/ is the only vowel within the word, it is usually pronounced as a wide (low) central vowel *ɜ*, for example: *bede* 'like', *texe* 'root', etc.

2.1.4.2. Alternation of high vowels

The high vowels /i/ and /u/ are often interchangeable. Normally the original vowel /i/ assimilates to /u/ if /u/ is independently present in the adjacent syllable, cf. the following free variants: *kuandugu* and *kuandigu* 'ankle-bone', *mun-tigi* and *mun-tugi* (from *mun-tigi*) 'to us' <we-LAT>, also within the nominal suffix *-gdugu/-gdugi* (5.1.2.10).

The vowel /u/ demonstrates a tendency to move to the front before the following /i/, that is, often *ui → üi*. However, *ui* and *üi* contrast phonologically (see 3.2.2.1.1). A change into the front vowel often happens, for example, when the vowel /u/ within the Dative morpheme *-du* is followed by the possessive affix *-i* (1SG, 2SG, REF.SG): *in'ei-du-i* 'to my dog' <dog-DAT-1SG> can be realized phonetically as [*in'ei-dü-i*]. On the other hand, in the same environment the vowel /u/ can assimilate to /i/ completely, thus the pronunciation [*in'ei-di:*] (< *in'ei-di-i*) is also common.

The vowel /i/ may labialize if the word contains the vowel /u/, cf. *lauli-mi ~ laulü-mi* 'dancing (INF)', *solümi ~ solimi* 'dried fish', *kuzi-mi ~ kuzü-mi* 'bending (INF)'.

2.1.4.3. Dropping of the initial /j/

The word-initial complex *jV* is optionally replaced by the long vowel /*i:*/. This is especially frequent in different forms of the interrogative pronoun *j'eu* and the pro-verb *ja-* (see Chapter 9), for example: *i:-le* (< *j'e-le*) 'what (LOC)', *i:-mi* 'why' from *ja:-mi* (the Infinitive of the indefinite proverb). Cf. also *ji:n-* ~ *i:n-* 'enter'.

Less frequently the initial /j/ is dropped before /u/, which is fronted in this case: *juŋkala-* ~ *üŋkala-* 'carry on a sledge'.

2.1.4.4. Labialization

For certain words the vowels /e/ and /u/ alternate freely in the first syllable, these are as follows:

(29)	*begdi*	*bugdi*	'leg, foot'
	bebu	*bubu*	Evidential particle
	meisi-	*muisi-*	'think'
	bubei	*bubui*	'similar, alike'
	wei	*wui*	'garden'

The presence of the round vowel /u/ instead of the original /e/ seems here conditioned by the assimilatory influence of the adjacent labial consonant.

The vowel cluster *au* is optionally pronounced as *ou*, that is, /a/ is labialized under the influence of the glide element, cf.: *tauxi* ~ *touxu* ~ *touxi* 'there', *boulima* ~ *baulima* 'corn', *wa-u* ~ *wo-u* 'you (PL) kill'.

The vowels /o/ and /a/ may be pronounced as /u/ and /o/ respectively in the position after /w/, especially if they are followed by a high vowel, cf. *wo-i* ~ *wu-i* 'makes (PRP)', *wa-i* ~ *wo-i* 'kill (PRP)', *wa-ili* β *wo-ili* 'he kills (3SG)'. Further reduction may lead to contraction into a long vowel: *wo-ini* 'he makes (3SG)' → *o:-ni* or *e:-ni*.

2.1.4.5. Reduction of word-final vowels

In rapid speech the word-final vowel may be deleted before the initial vowel of the next word, for example: *omo aziga* → *om aziga* 'one girl', *solimi olokt'o* → *solim olokt'o* 'he cooked dried fish'. As a result of such deletion two lexical words constitute a single phonological word with a single main stress (see 3.6.3 on stress placement rules).

(30) a. *Sagdi*   *ede-ili*   →   *sagdedʼeili*
          big   become-3SG
          'He became big'

      b. *bi* *a-wa*   →   *bäwʼa*
          me   that-ACC
          'me that'

In (30b) the deletion of the word-final /i/ leads to a change in the quality of the following vowel *a* → *ä* with the regular palatalization of the preceding consonant (2.2.3.2). The same phenomenon is sometimes observed word-internally: *sagda-li-e* 'he grew up' <big-INC-PP> → *sagda-lä*.

2.1.4.6. Alternations of /i/

In the word-final position the vowel /i/ in certain words undergoes a change in quality under the influence of the initial vowel of the next word. This, for example, is very typical of the demonstrative pronoun *uti* 'that', which may be pronounced as *uta* in the attributive function before an /a/ or /e/ (*uta aziga* 'that girl', *uta eni-ni* 'that mother', *uta eme-gi:-si-ni* 'when that one came' <come-REP-PC-3SG>). Cf. also: *kotoi-ti eni-ni* → *kotoi-ta eni-ni* 'the mother of the bald ones' <bald-3PL mother-3SG>.

In some other words the word-final /i/ freely alternates with /a/ independently of position, for example: *käfa* ~ *käfi* 'tick', *boulimi* ~ *boulima* 'corn', *jandasa* ~ *jandasi* 'badger', *agda* ~ *agdi* 'thunder', *zala* ~ *zali* 'barn'.

In certain idiolects the short /ä/ is observed instead of original short /i/: *bi* ~ *bä* 'me', *banixe* ~ *banäxe* 'thanks', *wopti* ~ *woptä* 'door, lid', *sagdi* 'big, large' ~ *sagdä-ŋi-* 'grow big'. Both vowels condition a partial palatalization of the preceding consonant (2.2.3.2). The variation in question is apparently related to the regular alternation /i/ ~ /ä/ observed in the Plural formation of some adjectives (6.1.2.1.1).

2.1.5. Stylistic variations

Certain variations are conditioned by the requirements of style and emphasis. According to Kormušin, we can even speak of three different registers (styles) of speech: normal, reduced, and expressive (Kormušin 1998: 52). This statement is perhaps too strong, since the difference between the styles concerns only a few phonetic points, namely, alternations of the vowel /i/ and the pronunciation of vowel clusters (for the latter point see 3.2.2.1). The grammar describes the so-called normal style, while the so-called reduced and expressive styles are characterized by certain peculiarities mentioned below. In fact, the so-called reduced style predominates in the narrative texts.

In the examples throughout the grammar (except for the present section) the particularities of the reduced and expressive pronunciation are not marked, although they are noted in the texts (see Chapter 25).

2.1.5.1. Expressive diphthongization

The word-final /i/ after a consonant may be lengthened into the diphthongoid /ie/ (normally pronounced with a rising pitch, see 3.6.5) when the corresponding word is emphasized. According to the stress-placing rules (3.6.3.2), the diphthongoid /ie/ is stressed in the word-final position.

(31)   a.   *Di:-za*   *aŋa-nie*   *b'agdi-e-mie*
           four-ten   year-3SG   live-PAST-1SG
           omo-zie   *nuan-zi-ni.*
           one-INST   he-INST-3SG
           'I lived for forty years with him alone.'
       b.   *Kanda*   *mafa*   *gakti-e-nie.*
           Kanda   old.man   freeze-PAST-3SG
           'The old man Kanda got frozen.'
       c.   *Weisi-ne-ze-fie!*
           rescue-DIR-SUBJ-1PL.IN
           'Let us go to rescue (him)!'
       d.   *Agda-mie*   *soŋo-li-ge.*
           be.glad-INF   cry-INC-PERF
           'He cried from happiness.'
       e.   *Dian-a-mie*   *ŋene:-ti*   *zugdi-tigi.*
           say-0-INF   go.PAST-3PL   house-LAT
           'They were going home talking.'

Expressive lengthening is regularly attested for the following forms: the Infinitive in *-mi* (7.5.3.1) and the 3rd person verbal affix *-ni* (7.2.1). The corresponding word may be repeated twice. In these cases it may express the duration of time within which the action takes place:

(32)   a.   *Bi-mie*   *bi-mie.*
           be-INF   be-INF
           'They were living, living'.
       b.   *ŋene-mie*   *ŋene-mie.*
           go-INF   go-INF
           'They are walking, walking'.
       c.   *Ilisi:-nie*   *ilisi:-nie.*
           stand-3SG   stand-3SG
           'He is standing, standing.'

In other cases expressive lengthening may render the intensity of the feature named by the corresponding word, either an adjective (33) or an adverb (34):

(33)   *Käŋa   bui   sagdie.*
       deer   animal   big
       'The deer is a very big animal.'

(34)   a.   *Weŋde-le   caixie.*
            throw-SEM   far
            'Throw (it) very far.'
       b.   *Eke-zie   tukä:-i!*
            slow-INST   run-IMP.2SG
            'Run slower!'
       c.   *B'azie   eme-gi-je.*
            early   come-REP-IMP.2SG
            'Come earlier.'

It is also frequent in addresses (see 12.2.1.2), especially in certain fixed expressions such as: *sita-mie* 'my son' <son-1SG>, *b'ata baja-nie* 'dear son' <boy deer-3SG>, *gagda-nie baja-nie* 'dear husband' <another-3SG dear-3SG>.

When the final /i/ follows a vowel, it is not lengthened into the diphthongoid /ie/ itself; the diphthongoid rather follows it. The segment /i/ in this case appears in the syllable onset position and is realized as a consonant /j/ (see 3.2.3), that is, Vi → Vjie. For example: *koŋo-jie* 'you get thin' (< *koŋo-i* <thin-2SG>); *bi tekpu-jie* 'my skin' (< *tekpu-i* <skin-1SG>). This also conditions the frequent variants of the 2nd person Singular Imperative morpheme *-i/j* ~ *-jie* (7.4.1), for example: *diga-i* ~ *diga-je* ~ *diga-jie* 'eat' <eat-IMP.2SG>'.

2.1.5.2. Expressive lengthening

In certain cases the final /i/ after a consonant is lengthened into /i:/, especially in coordinating constructions where it can express continuous action.

(35)   a.   *Te:-mi:*   *umi-mi:*   *soktoi-mi:*   *soktoi-mi:.*
            sit-1SG   drink-1SG   get.drunk-1SG   get.drunk-1SG
            'I am sitting, drinking, getting drunk, getting drunk.'
       b.   *Jaska-la-ni:*   *kuizü-le-ni:*   *galakta-i.*
            chest-LOC-3SG   box-LOC-3SG   seek-PRP
            'He is seeking (it) in the chest and in the box.'

In the expressive style the word-final /i/ may be followed by an *Ich-Laut*-type sound: *imexi* 'new' → *imexiç.*

2.1.5.3. Reduction of /i/

In rapid speech the word-final vowel /i/ in the position after the consonant undergoes deletion. This leads to the emergence of consonant-final words otherwise forbidden by the phonotactic constraints of Udihe (see 3.1.1). The relevant contrast does not disappear, the vowel /i/ being preserved as a secondary articulation of the preceding consonant. The consonant preceding /i/, except for /m/, is palatalized (2.2.3.2). This mostly concerns the dentals /l/, /n/, /s/, /t/, and optionally the labial /f/, cf.:

(36) *ŋene-ze-f^j*   ←   *ŋene-ze-fi*   \<go-SUBJ-1PL.IN\>
      nixe:-m   ←   *nixe:-mi*   \<do-INF\>
      gagda-n^j   ←   *gagda-ni*   \<another-3SG\>
      läs^j   ←   *läsi*   'very, a lot'
      bi-s'e-s^j   ←   *bis'e-si*   \<be-PERF-PC.SS\>

The consonant /s/ within the disjunctive marker *-As(i) ... -As(i)* 'either ... or' (see 18.2.2.1) is not palatalized when the final vowel is dropped (a very frequent case), for example:

(37) *Tuduze   sagdi-es   nic'a:-s?*
      potatoes big-DIS   small-DIS
      'Is the potato big or small?'

Neither is palatalization present when the consonant which originally preceded /i/ appears before another consonant as a result of *i*-deletion. This second consonant may be within a clitic element, for example, a focus clitic *-dA*. This in fact constitutes an argument in favor of the inclusion of the clitic within a phonological word. Cf. examples (38a) where the consonant /n/ is not palatalized after the deletion of /i/ because of the assimilative influence of the non-palatalized /d/ within the clitic, and example (38b) where the consonant /n/ is palatalized because the phonological word boundary prevents the following /d/ from influencing it.

(38) a. *belie-n-de (< belie-ni-de)*   'this fairy'
          \<fairy-3SG-FOC\>
          mö:-li-n-de (< mö:-li-ni-de)   'on his neck' (K 160)
          \<neck-PROL-3SG-FOC\>
      b. *belie-n^j (< belie-ni) dogdi:*
          fairy-3SG   listen.PRP\>
          'the fairy is listening'

When the 3rd person verbal inflection -*ni* is followed by the disjunctive -*dA* (18.2.2.1), the deletion of /*i*/ is obligatory, but palatalization does not occur either, cf.:

(39) *Nua-ni xauntasi-e-ni*   *Sonia škola-du*
     he-3SG ask-PAST-3SG   Sonia school-DAT
     bi:-we-n-de   *e-i-we-n-de.*
     be.PRP-ACC-3SG-DIS   NEG-PRP-ACC-3SG-DIS
     'He asked whether Sonia was at school or not.'

The deletion of the word-final /*i*/ is often observed in infinitives that correspond to manner adverbs, for example: *soŋo-m* ← *soŋo-mi* 'crying (INF)', as well as in ideophonic adverbs (usually focused), for example: *pukceľ* ← *pukceli* 'swollen'. In the latter case, consonant-final variants often lexicalize and become the only possible forms (see the list of ideophones in Chapter 26). The deletion of the verb-final /*i*/ is fairly frequent in rhetorical questions (40a) or in the expression of fast or alternating actions (40b).

(40) a. *Ono*   *nixe-ze-m*   *bi?*
         how   do-SUBJ-1SG me
         'What shall I do?'
    b. *Tukti-m*   *tukti-m.*
         climb-INF   climb-INF
         'He is climbing quickly.'

At least for one word, *i*-deletion in fast speech is regularly observed in the word-medial position: *sta* < *sita* 'child, son'.

2.2. Consonants

2.2.1. Consonant inventory

The consonantal system of the Southern dialect includes 17 phonemes.

2.2.1.1. System of the consonants

Only single (not geminated) consonants are phonologically present in Udihe. The system is presented below.

Table 6. Consonants

		Labial	Dental	Alveolar	Palatal	Velar
Plosives	Voiced	*b*	*d*			*g*
	Voiceless	*p*	*t*			*k*
Fricatives	Voiced					
	Voiceless		*s*			*x*
Affricates	Voiced			*z*		
	Voiceless			*c*		
	Nasals	*m*	*n*		*ñ*	*ŋ*
Sonorants	Laterals		*l*			
	Glides	**w**			*j*	

The symbol *ñ* represents IPA *ɲ*, *z* stands for the voiced alveolar affricate *ď*, and *c* for the voiceless alveolar affricate *ť*.

The voiced affricate /z/ may be pronounced as an affricate [*ď*], a dental fricative [z] or the stop *ď*, while the voiceless affricate /c/ is always an affricate. The intervocalic glide /j/ sometimes has a semi-vowel articulation: *aja* or *a'a* 'good'. The word-initial stop /t/ is aspirated before the back vowels /a/, /u/ and /o/. The lateral /l/ is slightly palatalized.

Simonov (1988: 55) also postulates the voiced velar fricative *γ* (or the velar approximant) for the Khor dialect (see also Menges 1968: 138), however, there is no evidence for a phonological contrast between *g* and *γ* in the Southern dialect. On the spirantization of intervocalic stops see 2.2.4.5. The intervocalic *f*, represented as such throughout the grammar, is an allophonic variant of /p/ (2.2.3.1).

2.2.1.2. Marginal consonants

Certain consonants are limited to a very specific lexical subsystem, namely ideophones and interjections, and are not therefore included in the consonantal system in 2.2.1.1. These are the consonants *h* (41a), and especially *r* (41b), and *ľ* (41c). The latter two may be geminated in expressive speech.

(41) a. *sü(h)* 'shoo!'
      b. *mur-mur* 'toothless'
         borbosu 'sound made by a hare'
         purk(e) 'sound made by wings'
         suar ~ suarr 'babbling'
         xer-xer ~ xeli-xeli 'very quickly'
         punärr 'going up from the top of the house (of smoke)'

c.   *käľ-käľ*   'pale'

   sifaľ ~ sifaľľ   'going up (about earth whipped up by the
                             wind)'

The consonant *r* is present within a few other words cited in Schneider's dictionary of the Khor dialect (Schneider 1936), sometimes freely alternating with /l/, for example:

(42)   *ali ~ ari*   'when'
       alta ~ arta   'tin'
       bultai ~ burtai   'forever'
       olo ~ oro   'reindeer'
       -rAgdA, -rugdu   affix of de-numeral nouns

cf. also in the modern Bikin dialect the variants *d(u)rug'afa ~ d(u)lug'afa* 'in two, half' and *eleči ~ erči* 'servant', as well as the Nanai loanword *merge(n)* 'hero'. The consonant *r* here seems to have appeared as an expressive variant of /l/. According to Kormušin, it has an apical articulation and is often voiceless (Kormušin 1998: 76). The word-final *ľ* is typically the result of the palatalization of the corresponding non-palatal consonant after the deletion of the final /i/ (see 2.2.3.2).

The glottal stop *ʔ* as a separate phoneme is absent from the modern Bikin dialect (see 2.1.1.5.2). However, it may appear in idiolects as a free variant of /k/ in certain consonant clusters (3.2.1.2) and in the word-final position within the suffix of the so-called Expressive Past (7.10.4.1).

Consonant gemination may sometimes be employed as an expressive tool, cf.: *xoñieñie* → *xoñieññie* 'very yellow', *akki-* 'sting, stab with a harpoon', *čim* → *čimm* 'streaming' (SK 770) and the following words from the Northern dialect: *akku* 'sting', *nakki* 'a kind of plant', and *jakki* 'wave'.

Recent borrowings from Russian may contain other consonants typical of Russian but not found in Udihe, such as *š* and *ž*.

2.2.2. Some remarks on the history of consonants

As a whole, the Udihe consonant inventory preserves the particularities of Proto-Tungus consonantism rather well. Apart from the change of certain intervocalic consonants into pharyngeal and laryngeal elements, on which see 1.3.2.1, the most important changes are the following:

(i) The original **w-* in the word-initial position is present in only one original word *wa:-* 'kill' (Cincius 1949b: 170). Otherwise the initial *w-* appeared as a prothetic consonant, or developed from /u/ (Kormušin 1998: 70). As noticed by this author, Schneider cites certain doublet forms with an initial /u/ and /w/ for the Khor dialect, such as *uakta - wakta* 'tree bark'.

(ii) The Proto-Tungus intervocalic -*j-, -*g-, -*r-, and -*w- were lost, with a compensatory lengthening of the preceding vowel (see 2.1.2).

(iii) The Proto-Tungus palato-alveolar affricates *č and *ǯ correspond to the alveolar affricates /c/ and /z/ respectively.

(iv) The word-initial glide /j/ usually has a prothetic origin and appeared before the original /i/, cf. *joxo* < *ike* 'pot' (Kormušin 1998: 79).

(v) The intervocalic /k/ developed from the Proto-Tungus geminated -*kk- (Kormušin 1998: 81).

(vi) The velar fricative /x/ is of secondary origin: word-initially it reflects the Proto-Tungus *p-, while in the intervocalic position and sometimes within a consonant cluster it goes back to -*k-.

(vii) The most typical changes in consonantal clusters are: *nb > m, *pk > kp, *lm > nm, and the change of the consonant *l into the velar /g/ or /k/: *lb > gb, *lp > kp, *lg > gg > g, etc.

2.2.3. Allophonic variations

2.2.3.1. Alternation p ~ f

Almost all intervocalic plosives are spirantized (see 2.2.4.5) but this varies among speakers. The only regular spirantization which leads to the development of an allophonic variant is the change p > f in the intervocalic position. The consonant f is treated as a separate phoneme in Schneider (1936) and Sunik (1968, 1997), and as a marginal phoneme in Kormušin (1998). Simonov accepts that p and f in Udihe are in complementary distribution (1988) but regards p as an allophonic variant of f. We here employ a different solution, namely we regard f as an allophonic variant of /p/. This is mostly based on systemic considerations (the symmetry of the system of consonants).

The examples below illustrate the allophonic variants of the phoneme /p/: p is word-initial and occurs within a consonant cluster (43a), and f is in the intervocalic position (43b). Notice that here and hereafter we deviate from phonological transcription and record the allophonic variant f when it is present.

(43) a. *pei*   'part'
          zakpa   'porridge'
          paki   'master'
          kapta   'parcel'
          pa: 'window'
          igompo   'bird cherry tree'
      b. *onofi*   'what sort of'
          nifanda-   'hit'
          safani: 'boring, tiring'

In several words the intervocalic -*f*- freely alternates with -*b*-, cf. *lifakta* ~ *libakta* 'mud'. Furthermore, according to the general rule (2.1.5.3) the agreement affix -*fi* (1PL IN) may lose the final vowel. If it is followed by a consonant-initial clitic, the consonant within the agreement morpheme is pronounced as /*b*/, cf.:

(44) *Ge   ŋeni-ze-b-ge.*
      well   go-SUBJ-1PL.IN-HORT
      'Well, let's go.' (K 197)

The word-initial *f* and the intervocalic *p* can be present only in certain recent borrowings from Russian or Chinese, for example:

(45) *fuetiŋe*   'airplane'   < Chinese
      fabrika   'fabric'   < Russian
      fuleŋe   'southern'   < Chinese
      kopala-   'dig'   < Russian

In more ancient borrowings the complementary distribution between *p* and *f* is preserved, cf.:

(46) *kofeika*   <   Russian *kopejka*   'kopeck'
      Pedä   <   Russian *Fedya*   proper name

In certain ideophones *f* occurs in the word-final position, where it developed as a result of the deletion of the final vowel, for example: *čif-čif* 'wet through (with sweat)' cf. *čifo-no-* 'get wet'. Such ideophones may be followed by the clitic focus particle -*dA*, but the consonant *f* is still preserved: *def-def* 'flapping its wings' + *de* (FOC) > *def-def-de* (Simonov 1988: 74). For Simonov this is an argument in favor of treating *f* as the underlying representation of the corresponding phoneme. However, in all other instances *f* is realized as *p* before a consonant, and a cluster that appears on the boundary between the word and the clitic cannot be considered a prototypical consonantal cluster.

2.2.3.2. Palatalization

Only the consonant /*n*/ has a phonemic palatal counterpart /*ñ*/ (see 2.2.1.1); minimal and quasi minimal pairs are presented below:

(47) *namu*   'sea'   *ñamai*   'warm'
      neŋu   'younger sibling'   *ñeŋu*   'wolf'
      na: 'earth, ground'   *ña*   'more, again'

However, /n/ and /ñ/ do not contrast before the front vowels /i/, /i:/, /ie/, /ö/, /ö:/, /äl/, and /ä:/ where only a palatalized nʲ is possible. In this case we transcribe it simply as n, for example: *ninta* 'man' [nʲinta], *nö*: 'sable' [nʲö:], *nieŋesi* 'get sweaty' [nʲⁱeŋesi], *nä*: 'skin' [nʲä:]. Palatalization also occurs in the word *anči* 'no' [anʲči], which contrasts to *anci* 'perhaps'.

Certain other consonants are allophonically palatalized before front vowels: the labials /b/, /p/, the dentals /s/, /l/, and the velars /k/, /x/ and /g/. For example:

(48) *bä*:   'month'   [bʲä:]
      gida   'spear'   [gʲida]
      aisi   'gold'   [aisʲi]
      uli-e-ni   'sew'   <sew-PAST-3SG>   [ulʲieni]
      tokö   'cloud'   [tokʲö]

The diphthongoid /ie/ causes the palatalization of every non-palatal consonant preceding it except /w/, for example: *umieni* 'drink (PAST, 3SG)' [umʲⁱenʲi], *dieleni* 'because' [dʲⁱelenʲi], *tie* 'pair' [tʲⁱe]. Palatalization of this type is not reflected in our transcription.

In 2.1.5.3 we addressed the reduction of the word-final /i/ that has led to the emergence of quite a few consonants that are distinctively palatalized.

2.2.3.3. Alternation /c/ ~ /č/

The alveolar affricate /c/ alternates with the palato-alveolar affricate č before the front vowels /i/, /i:/, /ie/, /ö/, /ö:/, /äl/, and /ä:/. This alternation is reflected in the transcription throughout the grammar. Examples of words with č are:

(49) *čöŋki*   'juice of the tree'   *čika-*   'gnaw'
      anči   'no'   *činda*   'little bird'
      čä: 'burbot fish'

In a few words the change c → č is also observed before /u/, for example: *čuguse* 'teal', *čundie* 'mole', *Ka:nčuga* 'clan name'. Before /o/ and /a/, č is attested in ideophones and loanwords:

(50) *čoloŋ-čoloŋ*   'limping'   *čaja*   'tea'
      guančou   'spade'   *časa*   'hour'
      čak-čak   'dry'

See also a few exceptional words: *ča:la-* 'want, agree', *čaza* 'trap'. On the other hand, the alveolar affricate /c/ may be present before /i/ and /i:/ in certain ideophonic words, such as *cincaula* 'large mosquito', *ci:ŋge-ci:ŋge* 'dangling'.

The allophonic variants /c/ ı /č/ in the modern dialect reflect the phoneme /c/, which in its turn corresponds to the Northern /č/ (from Proto-Tungus *č), see 1.3.2.2. They developed as a result of either the depalatalization of /č/ before non-front vowels, or as a secondary palatalization of /c/ before front vowels.

2.2.3.4. Velarization of /n/

The nasal /n/ changes into /ŋ/ in the position before /k/ and /g/. As a result, the consonant clusters *nk* and *ng* are not allowed (3.2.1.3), although the clusters *ŋk* and *ŋg* are fairly frequent. This alternation is present in the formation of the Past (7.1.2.2) and Perfect (7.1.3.2) of class II verbs that have an *n*-final stem. A stem-final consonant is represented by /ŋ/ before /k/:

		Past stem	Perfect stem
(51)			
dian-	'say'	*diaŋ-ki-*	*diaŋ-ka-*
digawan-	'feed'	*digawaŋ-ki-*	*digawaŋ-ka-*

2.2.4. Free variations

2.2.4.1. Variation of /k/

In a number of words the stops /k/ and /p/ freely alternate within a cluster when they precede /t/ or /c/, cf.: *kekte-* and *kepte-* 'lay down', *wopti* and *wokti* 'door', *b'akta* and *b'apta* 'smell', *ukčiga* and *upčiga* 'bird', *xulepte ~ xulekte* 'ashes', cf. also the interdialectal correspondence *tukti-* (Bikin) ~ *tupti-* (Samarga) (K 172) 'climb'. The same alternation is observed within the Decausative affix *-ktA- ~ -ptA-* (8.2.1.3).

The consonant /k/ optionally spirantizes within the clusters *kt, kc* and *kp* in words with back vowel harmony. Examples: *wakca- ~ waxca-* 'hunt', *gakpa ~ gaxpa* 'shoot with an arrow', *wokti ~ woxti* 'door'. In certain cases the spirantization of /k/ is observed in the initial position of words with back vowels: *koŋz'oi ~ xoŋz'oi* 'box, chest'.

2.2.4.2. Variation /s/ ~ /x/

In some idiolects the intervocalic /s/ may be replaced by the velar fricative /x/, at least in certain grammatical morphemes, for example: *bi-si-ni ~ bi-xi-ni* <be-PAST-3SG>, *eme-isi-ni ~ eme-ixi-ni* <come-PC-3SG>, cf. also *sita ~ xita* 'child, child'.

2.2.4.3. Variation /n/ ~ /l/

Free variation between /l/ and /n/ is attested, especially, in the dialect of Iman. For example: *banixe* ~ *balixe* 'thank you', *lali-* ~ *nali-* 'starve', *nifikti* ~ *lifikti* 'cork', *xunlepte* ~ *xulepte* 'ash', *ninme-* ~ *linme-* 'swallow', *nuki* ~ *luki* 'rope'. This variation is especially common for the 3rd person Singular agreement marker *-ini* ~ *-ili* in the Present tense, for example: *ŋene-ili* 'goes', *b'a-ili* 'finds', *gulin-e-ili* 'leaves'. The variants with the agreement marker *-ili* are reflected in the texts (Chapter 25).

2.2.4.4. Loss of initial /ŋ/ and /n/

The word-initial nasals /ŋ/ and /n/ may be optionally lost before /i/ and /u/, cf.: *ŋic'a* ~ *ic'a* 'small', *nim'aŋku* ~ *im'aŋku* 'tale', *nixe-* ~ *ixe-* 'do', *ŋumnigele-* ~ *umnigele-* 'screen oneself with a hand from the sun'.

2.2.4.5. Spirantization of intervocalic stops

The voiced stops /b/ and /g/ in the intervocalic position commonly undergo (partial) spirantization: *b* → *β*, *g* → *γ*, for example: *obo* [*oβo*] 'part', *uga* [*uγa*] 'voice', *mogolie* [*moγolie*] 'around'. According to Kormušin (1998), in the Northern dialect the intervocalic velar stop may completely sonorize. Spirantization of the intervocalic /g/ in the Southern dialect is often observed in the Lative case affix *-tigi* (see 4.2.2.4). Further development may lead to the complete loss of the intervocalic consonant, as happened, for example in the words *dian-* 'say' as pronounced by most speakers (cf. *digan-* in Schneider (1936)), *suese* 'axe' (cf. *suγese* ~ *sugese* in Kormušin (1998)), and *siguli* 'squash' (cf. *siγuli* ~ *siuli* in Kormušin (1998)). As mentioned in 2.2.1.1, Simonov (1988 and other publications) considers *γ* a separate phoneme, but there is no evidence for this in the Southern dialect.

2.2.4.6. Deletion of /j/

The intervocalic consonant /j/ tends to be deleted before /i/. This happens in particular in the affixes of the Present Passive particles *-uji* (for example, *wa-uji* or *wa-u-i* 'being killed'), cf. also *buji* and *bui* 'animal', *weji* and *wei* 'twenty'. In fact, in the modern language the pronunciation without /j/ predominates. At least historically, deletion of the intervocalic /j/ was also present before other non-back vowels, cf. the personal pronoun *bue-ni* 'he/she' (9.1.1) that developed from the 3rd person Singular possessive form of the noun meaning 'body' *beje-ni*.

2.3. Phonological alternations

2.3.1. Contraction of high vowels

In the course of derivation, two identical high vowels contract into a long vowel: $i + i \rightarrow i$:, $u + u \rightarrow u$:. In word-final position, the contraction into /i:/ happens mostly when an i-final case affix (Prolative, Ablative, Lative) or stem is followed by the personal affixes of the 1st and 2nd person Singular or Reflexive Singular (52a). The contraction into /u:/ occurs when the u-final stem or case affix (Dative) is followed by the 2nd person Plural or 1st person Plural Exclusive possessive marker -u (52b). The same alternations are typical of the declension of personal forms of participles (7.9.1).

(52)	a.	*dili:*	←	*dili-i*	'my head'
		<head-1SG>			
		igi:	←	*igi-i*	'self's tail'
		<tail-REF>			
		xokto-li:	←	*xokto-li-i*	'along your road'
		<road-PROL-2SG>			
	b.	*kodu:*	←	*kodu-u*:	'your son-in-law'
		<son.in.law-2PL>			
		keudidu:	←	*keudi-du-u*	'in our sack'
		<sack-DAT-1PL.EX>			

The contraction is observed only when the word-final high vowel is stressed (on the stress rules see 3.6.3). An unstressed high vowel does not contract. When the stress falls on a non-final bimoraic vowel (3.6.3.2) the contraction is absent and the word ends in a short vowel, cf. (53a) and (53b). In the following examples stress is marked by the symbol '.

(53)	a.	*dili:*	←	*dil'i-i*	'your head' <head-2SG>
	b.	*eme-isi*	←	*em'e-isi-i*	'when I come'
		<come-PC-1SG>			
		a:nta-tigi	←	*'a:nta-tigi-i*	'to your woman'
		<woman-LAT-2SG>			
		kawa-tigi	←	*kaw'a-tigi-i*	'to your tent'
		<tent-LAT-2SG>			

Note that in careful pronunciation contraction may be absent, while in the reduced style of speech long vowels are regularly shortened (see 2.1.1.2.3). Thus, three alternative pronunciations are in principle available.

(54)		normal	reduced	careful speech
	dili-i 'my head (1SG)'	*dili:*	*dili*	*dilii*

In word-medial position, the contraction *i* + *i* → *i:* is common when the *i*-final verbal stem is followed by the *i*-initial agreement affixes *-ini* (3SG PRES) and *-iti* (3PL PRES): *eme-gi-ini* <come-REP-3SG> → *eme-gi:-ni* 'he returns', *ise-si-iti* <see-IM-3PL> → *ise-si:-ti* 'they are looking'. In line with a general tendency for shortening (2.1.1.2.3), the long vowels developed through contraction may be shortened in fast speech.

When an *i*- or *u*-initial affix follows a vowel cluster that ends in a high vowel, the contraction is typically absent in fast speech: *bi in'ei* (< *in'ei-i*) 'my dog (1SG)', *bu zeu* (< *zeu-u*) 'our food (1PL.EX)'. In more careful pronunciation, however, the final vowel may be lengthened, cf.: *xui:* (< *xui-i*) 'is boiling (PRP)', *mui:* (<*mui-i*) 'my horse (1SG)'.

2.3.2. Labialization of /e:/

The long /e:/ that appeared as a historical contraction with the pharyngeal -**h*- within the Past tense marker -*hA*- (< -**sa*-) is labialized after *u*-final verbal stems: *aju*- 'love' + PAST → *aju-o:*- (< *aju-e:*- < *aju-he*-); *akpu*- 'sweep' + PAST → *akpu -o:*- (< *akpu-e:*- < *akpu-he*-).

When the stem-final /u/ is preceded by another vowel or is long (/u:/), it appears in the syllable-initial (onset) position before the following /o:/ and is realized as the consonant /w/, cf.: *dau*- 'cross the river' + PAST → *daw-o:*- (< *dau-o:*- < *dau-e:*- < *dau-he*-); *eu*- 'go down' + PAST → *e-w-o:*- (< *eu-o:*- < *eu-e:*- < *eu-he*-) Cf. also *teu-gi*- 'put back' (put-REP) and *tew-o:-ni* 'he put' (put-PAST-3SG). The same is observed in the Past tense of the Passive verbs (8.2.1.5) when the Passive marker -*u*- follows a vowel-final stem: *ise-w-o:*- 'be seen' (< *ise-u-o:*- < *ise-u-e:*- <see-PAS-PAST>).

Verbs with an underlying long /u:/ undergo the same alternation in the Past tense (55a). On the other hand, verbs that end in an underlying short /u/ that may be lengthened by prosodic lengthening (2.3.4) do not demonstrate the alternation /u/ ~ /w/ (55b). In the examples below the bare stems of the verb 'die out, become dim' and 'give' end in the long /u:/, however, only for (55a) is it underlying, as is shown by the Future form. The underlying long /u:/ is represented by *uw* before the Past tense marker -*o:*-, while the underlying short /u/ is unchanged.

(55)	bare stem	Future, 3SG	Past, 3SG
a.	*su:* 'die out'	*su:-zeŋe-ni*	*suw-o:-ni*
b.	*bu:* 'give'	*bu-zeŋe-ni*	*bu-o:-ni*

2.3.3. Prosodic lengthening

The prosodic structure of Udihe requires bimoraic feet (3.6.2). Since the minimal lexical word is universally known to be equal to a foot (McCarthy and Prince 1995), the Udihe minimal lexical word must be bimoraic. According to this principle, in a monosyllable with an underlying short vowel, the vowel necessarily lengthens. See, for example, the bare monosyllabic stems of the verbs 'kill' and 'give'. These exhibit a long vowel, whereas polysyllabic forms of the same stems have short vowels:

(56)	'kill'	'give'
bare stem	*wa:*	*bu:*
Future 3SG	*wa-zaŋa-ni*	*bu-zeŋe-ni*
Subjunctive 3SG	*wa-za*	*bu-ze*

Words with underlying long vowels do not demonstrate such alternations in vowel length (cf. 55a).

As shown in 3.6.3.3, the word-final syllable with a short high vowel (in inflectional affixes) is extrametrical with respect to stress placement rules. In bisyllabic words where the second syllable does not belong to the stem and has a short high vowel, the first syllable vowel is lengthened. This suggests that the word-final short high vowels do not provide the mora necessary to ensure bimoraicity of the prosodic word, and is in line with the analysis of these vowels as extrametrical, for example, *wa:-mi* 'kill (INF)'. Forms with the final postvocalic /i/ do not exhibit lengthening: *wa-i* 'kill (PRP)'.

2.3.4. Consonant deletion

On the deletion of the stem- or affix-final consonant /n/ employed to prevent illegitimate consonant clusters, see 3.4.1.

Chapter 3
Phonotactics and prosody

3.1. Positional restrictions

This section deals with the phonotactic rules that condition the position of vowels and consonants with respect to the word boundaries.

3.1.1. Word-final position

The overwhelming majority of native (non-borrowed) words end in a single vowel (*tege* 'gown', *ni:kte* 'fern') or in a vowel cluster (*ad'au* 'twins', *bei* 'in vain'). On the possible vowel clusters, see 3.2.2. An important phonotactic restriction on the word-final position is the prohibition on consonant segments and, accordingly, consonant clusters.

Word-final consonants have a marginal status and occur only in the following three cases. They may appear as the result of the loss of final high vowels (/i/ or less frequently /u/), as discussed in 2.1.5.3. The loss of the final /i/ leads to the palatalization of the preceding consonant (2.2.3.2). Second, word-final consonants are present in certain ideophonic adverbs. At least in some cases they seem to have emerged as lexicalized variants of their vowel-final counterparts. For a small group of words the two variants (consonant-final and vowel-final) are simultaneously present in the language (57a). In other cases only the consonant-final variant is preserved (57b). Those consonants found in the ideophones in the word-final position are /n/, /ñ/, /l/ (phonetically usually [lʲ]), /r/, /s/ ([sʲ]), /f/, /m/, /ŋ/, and /k/.

(57)	a.	*tef-tef*	'soft'	*tefu-tefu*
		čif-čif	'completely (sweaty)'	*čifu-čifu*
		taf	'all through'	*tafu-tafu*
		per-per	'numb from sitting'	*peli-peli*
		kef-kef	'broken completely, with a crash (of a tree)'	*kefutu-kefutu*
	b.	*weŋbek-weŋbek*	'staggering (of walking)'	
		kälʲ-kälʲ	'pale'	
		kok-kok	'hard'	
		bokčom-bokčom	'wrinkled'	

piŋ-piŋ	'trodden' (SK 749)
logzoŋ-logzoŋ	'crooked' (SK 523)

Further examples can be found in the substantially complete list of ideophones in Chapter 26.

Finally, in a number of grammatical morphemes the variant with the word-final consonant has been generalized:

(58) *de(xe)m(i)* 'any' (9.6.3)
  -As ... -As (rarely *-Asi ... -Asi*) 'either ... or' (18.2.2.1)
  the adverbial element *c'of* (< *c'ofu*) 'forever'
  -k Expressive Past (7.10.4.1)

Recent borrowings from Russian may end in a consonant, while in older borrowings from Russian and Chinese an epenthetic vowel prevents a word-final consonant (1.5.2.2.1; 3.4.1.2).

3.1.2. Word-initial position

Restrictions on the occurrence of segments in the word-initial position are partly motivated by the phonotactic rules of the language.

(i) The so-called secondary vowels (2.1.2) /ä/, /ö/, /ü/, as well as their long counterparts, do not occur word-initially.

(ii) Because of the historical sound change **xi-* > *si-* the initial string *xi* is absent (Menges 1968; Kormušin 1998: 82).

(iii) The ban on tautosyllabic consonant clusters (3.2.1) motivates the absence of word-initial clusters.

(iv) Initial vowel clusters beginning with high vowels are not acceptable because an initial prevocalic glide is syllabified as syllable onset and is pronounced as a consonant: *#ua* -> *#wa*, *#io* -> *#jo* (3.2.3). Schneider and Kormušin cite variants in the pronunciation of the initial prevocalic /w/ in the Northern dialect (*uakta* and *wakta* 'grass'). However, in the modern Bikin dialect only the consonant pronunciation of initial glides is possible.

3.2. Co-occurrence restrictions

This section deals with the co-occurrence of adjacent vowels and consonants. Vowel harmony is addressed in 3.3.

3.2.1. Consonant clusters

Udihe does not allow tautosyllabic adjacent consonants, therefore three-consonant clusters are not acceptable, and within a two-consonant cluster the syllable boundary is always located after the first consonant. Clusters that consist of two identical consonants are typically absent. Due to the fact that most morphemes are vowel-final (3.5), most consonant clusters occur morpheme-internally. A handful of exceptions to this generalization are provided by *n*-final nominal and verbal stems followed by a suffix that begins with a dental consonant (3.2.2). Thus, the only cluster allowed at a morpheme boundary is a cluster of type "*n* + dental", while even after *n*-final stems other clusters are prevented either by epenthesis (3.4.1.1) or by consonant deletion.

The most important restriction on clusters of two obstruents is that they must agree in voicing. Voiced obstruents do not co-occur with voiceless obstruents within a cluster. Sonorants can be combined with both voiced and voiceless consonants. The spirants /x/ and /s/ as well as the sonorant /l/ are not normally present within consonant clusters. The glides /w/ and /j/ only occur intervocalically, or in the word-initial position (see 3.2.3. for further details). Table 6 gives the possible combinations according to natural classes; details are discussed in the subsections. In the table the symbols +/- mark the presence/absence of the theoretical possibility of the corresponding cluster.

Table 7. The co-occurrence of consonants

C1 \ C2	voiced stops and affricates	voiceless stops and affricates	x, s, l, w, j	other sonorants
voiced stops and affricates	+	-	-	-
voiceless stops and affricates	-	+	-	-
x, s, l, w, j	-	-	-	-
other sonorants	+	+	-	+

In the following we give one example for each attested cluster.

3.2.1.1. Voiced clusters

(59)	cluster	example	
	bd	*abdä:*	'leaf'
	bz	*sebzeŋke*	'interesting, funny'
	gb	*dogbo*	'night'
	gd	*agda-*	'get happy'
	gz	*Agza*	name of a village

Clusters beginning with /d/ are impossible. The cluster *bg* is occasionally attested in the Northern dialect as a result of the following development: *-fi* (1PL.IN) + *ge* (HORT) → *fge* → *pge*, for example, *ŋene-ze-b-ge* 'let us go' <go-SUBJ-1PL.IN-HORT>.

3.2.1.2. Voiceless clusters

(60)   cluster   example

    kt (xt)   *zakta*   'millet'

    kc (xc, ks) *tukca ~ tuksa*   'hare'

    kp (xt)   *cukpa*   'path'

    pc (ps)   *tapči*   'full'

    pt   *kepte*   'wall'

Clusters *kt* and *pt*, on the one hand, and *kc* and *pc*, on the other hand, are in free variation in words with back vocalism (2.2.4.1). The spirants /s/ and /x/ do not participate in voiceless clusters. The only exceptions in our corpus are *asta-* 'release, let go', *sta* 'son' developed from *sita*, as well as the Northern *kusta* < *kusikta* 'cedar nuts' and *meste* < *mesikte* 'wild grapes'. We sporadically find *ks* and *ps* pronounced instead of *kc* and *pc*, respectively. *x*-initial clusters can appear as the result of the optional spirantization of /k/ (2.2.4.1). *t*-initial clusters as well as the cluster **pk* are prohibited (cf. the replacement of the original *pk* by *kp* in the old Russian loan-word *kakpa* 'trap', 1.5.2.2.1).

There is a certain tendency to pronounce the first consonant in the clusters *kt* and *kp* as a glottal stop, cf.: *tukti- ~ tuʔti-* 'climb', *cokpo- ~ coʔpo-* 'grasp with claws'.

3.2.1.3. Clusters with sonorants

In clusters that consist of a plosive and a sonorant, the sonorant may precede the plosive, but not vice versa. Since all consonant clusters with the sonorant /l/ have undergone phonological changes in the history of Udihe (2.2.2), /l/ does not occur within consonant clusters, except in certain loan-words (*zaŋlaŋa* 'cockroach' < Chinese, *malta* 'white whale' < Nanai (Schneider 1936: 49)). The sonorant /ŋ/ cannot be a second component of a cluster, and the sonorant /ñ/ is limited to certain clusters.

3.2.1.3.1. Sonorant + voiceless plosive

(61) | cluster | example | |
| --- | --- | --- |
| *ŋk* | *ŋim'aŋku* | 'tale' |
| *ŋt* | *uŋta* | 'boots' |
| *ŋc* | *guaŋčou* | 'spade' |
| *ŋp* | *jaŋpa* | 'shaman's belt' |
| *mt* | *amta* | 'taste' |
| *mp* | *gampa* | 'porridge' |
| *nt* | *a:nta* | 'woman' |
| *nc* | *cincaula* | 'large mosquito' |
| *mc* | *čimčei* | 'finger' |

The spirants /x/ and /s/ do not occur after sonorants, other than in certain loan words (for example, the words *dunsi* 'things, belongings' and *saŋxua* 'lunch, dinner' borrowed from Chinese). The cluster *nk* is not possible because /n/ is velarized in the position before /k/: *nk* > *ŋk* (2.2.3.4). The clusters *np* and *mk* also seem to be absent. The palatal /ñ/ does not occur before voiceless plosives.

3.2.1.3.2. Sonorant + voiced plosive

(62) | cluster | example | |
| --- | --- | --- |
| *ŋg* | *boŋgo* | 'first, main' |
| *ŋz* | *jaŋza* | 'jewelry' |
| *ŋd* | *oŋdo* | 'glutton' |
| *ŋb* | *waŋba* | 'tortoise' |
| *md* | *kemdexi* | 'fish tail' |
| *mz* | *boŋgomzi* | 'main' |
| *mb* | *amba* | 'evil spirit' |
| *mg* | *pamgu* | 'Adam's apple' (K 277) |
| *nz* | *banza* | 'board' |
| *nd* | *činda* | 'bird' |

The palatal /ñ/ does not occur before the voiced stops /b/, /d/, and /g/ and is occasionally present before /z/ in borrowed words (*kuñzi* 'ladle' < Chinese). The cluster *ng* is absent because of the /n/ velarization: *ng* → *ŋg* (2.2.3.4). The cluster *nb* has undergone an historical transformation into /m/. An example of this historical sound change is the Accusative affix -*mA* of the class II nominal stems (4.1.3): the stem-final /n/ and the affix-initial /b/ changed into /m/ (*xoton-bA* <city-ACC> → *xoto-mA*).

3.2.1.3.3. Sonorant-only clusters

(63)   cluster   example

ŋm	*aŋma*	'mouth'
ŋñ	*saŋña*	'smoke'
ŋn	*waŋna-*	'go to kill'
mn	*kamnu*	'glue'
mñ	*tamña*	'fog'
mŋ	*Kumŋoŋko*	clan name (Kormušin 1998: 6)

ñ- and *n*-initial clusters are absent.

3.2.2. Vowel clusters

The string of two or three non-identical adjacent vowels is traditionally treated either as a diphthong (triphthong) or as a bisyllabic (trisyllabic) cluster. The phonotactic restriction of vowel harmony (3.3) implies that only identical non-high vowels are present within a word. Therefore in bivocalic clusters only one non-high vowel may be present. For trivocalic clusters it is theoretically possible to have two identical non-high vowels separated by a glide; in practice, however, such clusters are never found and typically only one non-high vowel occurs within three-vocalic clusters as well.

In 3.2.2.1 we present a list of possible Udihe vowel clusters, while in 3.2.2.2 we discuss their phonological status, and the arguments in favor of their bi- and trisyllabicity. The argument that the high vowel within a cluster cannot be viewed as a glide consonant from a phonological point of view is covered in 3.2.3.

3.2.2.1. The system of vowel clusters

3.2.2.1.1. Bivocalic clusters

Bivocalic clusters consist of a short non-high vowel (/o/, /e/, /a/, /ö/, /ä/) and a high vowel /i/, /u/ (rarely /ü/):

(64)   a.   high vowel + non-high vowel

cluster	example	
ue	*due*	'top'
ua	*nuani*	'he'
uo	*zuolo-*	'frolic'

b. non-high vowel + high vowel

cluster	example	
eu	*leukte*	'water-plants'
au	*daumi*	'bridge'
ou	*pou-pou*	'dark' (also *pui-pui*)
äu	*bagäu*	'enemy'
öü	*zätöü*	'sparrow'
ai	*aisi*	'gold'
oi	*kotoi*	'bald'
ei	*ei*	'this'
äi	*tukä-i*	'run (PRP)'
öi	*mogö-i*	'my wooden bucket (1SG)'

Clusters beginning with a glide followed by /ä/ or /ö/ are not found. The clusters *ie, üö,* and *iä* mentioned in Schneider (1936) and considered the only clusters with diphthong status in Simonov (1988) are absent from the modern Bikin dialects because they were transformed into the long vowel phonemes /ie/ (with a diphthongoid pronunciation, see 2.1.1.2.2), /ö:/, and /ä:/, respectively. The cluster *io* is apparently very rare; in our material it is only found in three words: *Pioŋka, Gioŋka* (clan names), and *miondo* 'gun', but their pronunciation may vary (*Piaŋka, Päŋka, Gäuŋka, mianda, mäunda*).

As discussed in 2.3.1, in some idiolects the vowels /e/, /o/, and /a/ are neutralized before the high vowel, so the clusters *eu, au, ou,* on the one hand, and *ei, ai, oi,* on the other hand, may be pronounced as phonetically identical. For such idiolects the original quality of the non-high vowel may be established on the basis of co-occurrence restrictions driven by vowel harmony (3.3).

Clusters that consist of two high vowels are the following:

(65)
cluster	example	
üi	*züi*	'saw'
ui	*zui*	'sour'
iu	*giuse*	'roe'

3.2.2.1.2. Clusters with long and laryngealized vowels

Laryngealized non-high vowels (66a) and long vowels (66b) may be present within vowel clusters as their first (but not second) component preceding a glide. The rare vowels /ö:/ and /ü:/ do not typically occur within such clusters. The clusters occur stem-internally and may appear in the course of morphological derivation.

(66) a. cluster   example
      'au   *ñ'aula*   'young, youth'
      'ai   *'ai-ni*   'his elder brother (3SG)'
      'eu   *em'e-u*   'we came' <come.PERF-1PL.EX>
      'ei   *in'ei*   'dog'
      'ou   *oŋmon'ouse*   'forgetful'
      'oi   *koŋz'oi*   'box, chest'
      'äu   *tuk'ä-u*   'we run' <run.PERF-1PL.EX>
      'äi   *tuk'ä-i*   'you run' <run.PERF-2SG>
  b. *a:u*   *xula:-u*   'your blanket (2PL)' <blanket-2PL>
      a:i   *xula:-i*   'your blanket (2SG)' <blanket-2SG>
      ä:u   *mä:usa*   'gun'
      ä:i   *tukä:-i*   'you run' <run.PAST-2SG>
      o:u   *imo:-u*   'your fat (2PL)'
      o:i   *imo:-i*   'your fat (2SG)'
      e:i   *eme:-i*   'you came' <come.PAST-2SG>
      e:u   *eme:-u*   'you came' <come.PAST-2PL>

3.2.2.1.3. Trivocalic clusters

Trivocalic clusters occur much more rarely. In native stems such clusters typically include one laryngealized vowel (67a). Trivocalic clusters may appear as a result of suffixation (67b).

(67) a. *ku'ai*   'ear'
      cu'ai   'bird cherry'
  b. *jandau-i*   'my sickle (1SG)'
      bua-u   'our God (1PL.EX)'

3.2.2.2. The status of vowel clusters

Schneider (1936, 1937) was the first to qualify vowel clusters as diphthongs. Since any type of non-high vowel can be a component of a diphthong (short vowels, long vowels, laryngealized vowels and – in the Northern dialect – pharyngealized vowels), this means that theoretically one would have to add an excessively large number of phonemes to the vowel inventory. Indeed, the number of vowel phonemes in Schneider's description is about 70.

Under another analysis (Sunik 1968, 1997; Simonov 1988; Kormušin 1998), vowel clusters are regarded as bisyllabic complexes. According to Simonov (1988: 70–71), the components of a vowel cluster may bear a different stress (secondary stress and primary stress), for example: *bu'adu* 'outside', and belong to different "rhythmic groups" within the word. On this ground they are

considered to be within different syllables. The main argument for the bisyllabicity of vowel clusters advanced by Kormušin (1998: 50) is of morphological character. Vowel clusters are treated as bisyllabic because the morpheme boundary may be located between their components: *dala-u-si-* 'feed (animals)' <lap-CAUS-IM>, *eme-ini* 'he comes' <come-3SG>, *umi-ge-u* 'we drank' <drink-PERF-1PL.EX>. An additional argument is historical: the components of vowel clusters go back to vowels within two different syllables, since the clusters developed as a result of the loss of the intervocalic consonant. Neither of these two arguments is convincing. In particular, the morphological criterion does not work because the morpheme boundary may also be located "within" a long vowel, although the monophonemic status of long vowels is uncontroversial and was recognized as such by Kormušin himself: *dili:* 'my head' (← *dili-i* <head-1SG>), *ana:-ni* 'he pushed' (← *ana-a-ni* <push-PAST-3SG>), *zugdi-du:* 'in our house' (← *zugdi-du-u* <house-DAT-1PL.EX>), etc.

We present below some phonological arguments that support the bisyllabicity analysis.

First, if vowel clusters are considered diphthongs, they must be analyzed as bimoraic. This follows from the fact that vowel clusters are found in structures (C)VV: *au* 'cap', *g'ai* 'crow', *bui* 'animal', *bua* 'God', *loi* 'nest', etc. As argued in 3.6.2, the prosodiced word in Udihe must be minimally bimoraic, thus, such words should be regarded as having two moras. The stress placement rules ensure that in polysyllabic words bimoraic segments are stressed (3.6.3.2). However, the vowel clusters do not receive a primary stress unless they occur on the last syllable of the word. Cf. (68a), demonstrating an unstressed vowel cluster, and (68b) which shows that bimoraic (long and laryngealized) vowels in the same position are stressed.

(68)   a.   *daum'i*   'tobacco'
            gaul'i   'Korean'
            bait'a   'fault'
            ais'i   'gold'
            deuz'e   'beans'
            guakt'a   'moustache'
            zauŋ'a   'greenling (a sort of salmon)'
       b.   *'a:nta*   'woman'
            'e:de   'stupid'
            b"ata   'boy'
            g' 'ala   'shell'

The contrast between (68a) and (68b) demonstrates that vowel clusters behave differently from bimoraic segments with respect to stress assignment, and therefore cannot be analyzed as prosodically equal. Since stress placement in (68a) does not differ from the pattern available for trisyllabic words without

vowel clusters, such as *azig'a* 'girl', and *emugd'e* 'stomach', it is logical to assume that vowel clusters are combinations of two monomoraic segments (on stress-placement rules see 3.6.3). Note that in clusters that contain a bimoraic (long or laryngealized) vowel as one of their components (3.2.2.1.3) this vowel is stressed according to the general stress rule: *ñ"aula* 'young, youth', *m'ä:usa* 'gun'.

Second, in fast speech (which Kormušin terms the "reduced" style) the clusters may indeed be contracted into a long (bimoraic) vowel. Normally this happens in words with the structure (C)VV, and for some words the contracted forms seem to have become the standard pronunciation. For at least one word both contracted and non-contracted variants are generalized and differentiate the lexical meaning: cf. the contracted variant *ba:* that normally means 'place, nature; also as expletive subject' (14.1) and the uncontracted *bua* 'god'. Importantly, the contraction always takes place "in one direction": the resulting long vowel corresponds in quality to the second component of the cluster, independently of it being a high or non-high vowel, cf.:

(69) a. *bua*   *ba:*   'place, nature'
          zua   *za:*   'summer'
          nüö   *nö:*   'sable'
      b. *zeu*   *zu:*   'food'
          teu   *tu:*   'all'

The contraction of vowel clusters is observed in some derivational processes, for example, in the Passive formation (8.2.1.5): *an-u:-mi* < *ana-u-mi* 'I am pushed' <push-PAS-1SG>. Clusters with the vowel /i/ do not normally contract, except for the cluster *Ai* that appears when the 3SG and 3PL Present affixes *-ini* and *-iti* follow the vocalic verbal stem. Such a cluster is sometimes contracted into the long /i:/, for example: *ede-weni:-ni* < *ede-wen-e-ini* 'make (something) become (something)' <become-CAUS-0-3SG>.

Since the second vowel in the cluster always preserves its quality, it is natural to assume that this vowel is stressed. Indeed, in careful speech the stress is present.

(70) *a'uni*   'his cap (3SG)'
      lo'ini 'his nest (3SG)'
      bu'a   'place, nature'

This stands in agreement with the stress rule that requires stress on the rightmost non-high vowel in bisyllabic words without bimoraic segments (3.6.3.2). Alternatively, if the vowel cluster were monosyllabic (a diphthong), we would expect its non-glide component to bear the stress and to preserve its quality after contraction. Since such forms (for example, **ze:* instead of *zu:* < *zeu*) are not attested, this supports the analysis of vowel clusters as a

combination of two vowels belonging to different syllables, while the second of them is stressed. In fact, in clusters where the first component is bimoraic (long or laryngealized) it bears the stress (3.6.3.2) and such clusters do not contract: *j'eu* 'what' (but not **juː*).

Thus, vowel clusters behave distributionally as bisyllabic. Indeed, as already noticed by Simonov, they sound and are perceived as bisyllabic in slow speech. Although they can contract into a diphthong or a long vowel (sometimes with a diphthongoid pronunciation, see 2.1.1.2.2), this is typical only for certain clusters, certain types of words, and certain pronunciation styles.

Note, finally, that all that has been said applies only to native (non-borrowed) words. Vowel clusters in those Chinese borrowings not yet completely integrated into the language are often pronounced as a diphthong (3.2.2.2).

3.2.3. Status of glides within a syllable

The intervocalic position is the only position where glides (/j/, /w/) and high vowels (/i/, /u/) are in phonological contrast. High vowels may appear intervocalically, that is, within trivocalic clusters in the course of morphological derivation, although these cases are not frequent. According to the arguments presented in the previous section, they syllabify as syllable nuclei in this case (71a) while intervocalic glides syllabify as syllable onsets (71b). Dots are used below to indicate syllable boundaries.

(71)   a.   *se.u.i*   'my oar (1SG)'
              ga.u.i   'my pole (1SG)'
              'a.i.u   'our vodka (1PL.EX)'
              g'a.i.u   'our crow (1PL.EX)'
      b.   *me.je*   'mind'
              ka.wa   'bark tent'

In the other positions high vowels and glides are in complementary distribution. In the word-initial prevocalic position only glides are acceptable:

(72)   *jaŋza*   'jewelry'
      we: 'mountain'

In other words, vowel clusters beginning with a high vowel do not occur word-initially. Word-medially, glides are not present when they are preceded by a consonant (cf. the absence of clusters **Cj* and **Cw*, 3.2.1) but there are clusters that begin with a high vowel (3.2.2).

In the preconsonantal position or word-finally glides are not found either (clusters **jC*, **wC* are absent, see 3.2.1), while high vowels occur within

vocalic clusters (3.2.2). Although phonetically they may be realized as /w/ and /j/ in some idiolects, there are distributional reasons to believe that phonologically they should be identified as vowels. First, the consonant /p/ is realized as *f* after this segment, as only occurs intervocalically (2.2.3.1), cf.: *maifa* 'a measure of length', *tüifaŋa* 'plane (a tool)'. Second, triconsonantal clusters in Udihe are absent due to the ban on tautosyllabic consonantal clusters (3.2.1). However, the vowel cluster ending in a glide may be followed by two consonants. This shows that the second element in the cluster must be vocalic.

(73) *waikta*   'nail'   *aikta*   'fir-tree'
      deipti   'cover, lid'   *kaiŋku* 'brake for leather'
      leukte   'water-plants'   *ŋeigze* 'bright'

Finally, the second component of the cluster may be word-final, although, according to the phonotactic rules of Udihe, word-final consonants are not otherwise accepted (3.1.1):

(74) *ku'ai*   'ear'   *teu*   'all'
      kui   'strength'   *au*   'cap'

3.3. Vowel harmony

Udihe has a system of dual harmony based on rounding and height distinctions. Only non-high vowels harmonize, while high vowels are harmony-neutral: on the one hand, they freely co-occur with all vowels, on the other hand, they block the spreading of the harmonic features. Non-high vowels are segregated into three distinct sets that share harmonic features: non-round low vowels (/a/, /ä/), non-round mid vowels (/e/, /ie/), and round mid vowels (/o/, /ö/). Long and laryngealized vowels behave harmonically in the same way as their short versions.

The domain of harmony is the phonological word, including clitics (3.5.3.1). The harmony is root-controlled. An additional restriction is that vowels are only specified for backness in roots (on root structure see 3.5.1), while in affixal morphemes non-high vowels may only be non-front.

3.3.1. Roots

In bisyllabic and trisyllabic roots vowels are specified for backness. Non-high vowels harmonize for the feature of height and rounding. High vowels (/i/, /u/, and the rare /ü/) fail to harmonize.

3.3.1.1. Co-occurrence of vowels

The co-occurrence of vowels in roots can be represented by the following scheme:

(75)   see examples
    a. /a/ /ä/   /i/   /u/   /ü/   (76a)
    b. /o/ /ö/   /i/   /u/   /ü/   (76b)
    c. /e/ /i/   /u/   /ü/   /ie/   (76c)

Examples of bisyllabic and trisyllabic roots are in (76).

(76) a. *kapta*   'parcel'   *aziga*   'girl'
          bäs a   'river'   *gautu*   'hoe'
          kali   'sig (a kind of fish)' *ad'au*   'twins'
          tukä-   'run'   *kuliga*   'snake'
          susa-   'escape'   *lifakta*   'mud'
      b. *solö:*   'Siberian weasel'   *miondo*   'gun'
          kömpo   'thorn'   *ilondo*   'minnow'
          toŋi   'lake'   *kosolo*   'currants'
          n'olö   'caterpillar'   *bogüso-*   'torture'
          kodu   'son-in-law'   *mo:mugu*   'stack of
                                                             firewood'
      c. *sita*   'child'   *emugde*   'stomach'
          tekpu   'skin'   *kusige*   'knife'
          tiu   'pillow'   *u:dugu*   'scraper'
          cuŋe   'onion'   *zueze*   'table'
          egdi   'many'   *tukulu*   'bottle'
          dieli-   'fly'   *iŋini:*   'cold'
          uli   'water'   *igisi-*   'keep,
                                                             bring up'
          eke   'time'   *degumu*   'poles for
                                                             drying fish'

3.3.1.2. Traces of high vowels harmony

Some traces of rounding harmony for high vowels can be noticed. First, in roots where only high vowels are present there is a certain tendency for them to correlate in rounding value; see also the types of affixes in 3.5.2. High vowels often assimilate to each other (2.1.4.2). Second, the round vowels /o/ and /ö/ are more easily compatible with /u/ than with /i/; in fact, words where /i/ and /o/ (/ö/) co-occur are rare. They are cited below.

(77)   *koli*   'law, custom'   *kico*   'upright'
       kokpi-   'open; have enough time'   *iɲofo*   'bird cherry tree'
       kokčiľ   'curly'   *silosi-* 'warm'
       disokto   'wild garlic'   *oloxi*   'squirrel'
       dogdi-   'hear'   *doxi*   'full'
       olin-   'instead'

3.3.1.3. Disharmonic roots

In disharmonic roots each vowel is specified for a whole set of distinctive features. They are represented by recent Chinese and Russian borrowings.

(78)   *guaŋčou*   'spade'
       zätöü   'sparrow'
       kab'ou   'bifurcated object'
       laulou ~ loulou 'maternal grandmother'
       nade   'must'

Disharmonic roots deviate from the harmonic principle of co-occurrence of vowels, but their effect on the harmony in affixes (3.3.2) is not haphazard: vowels in the affixes harmonize to the last non-high root vowel, according to the general rule.

3.3.2. Affixes

On the phonological structure of affixes see 3.5.2.

3.3.2.1. Harmony to the root

Non-high vowels in affixes and clitics (3.5.3) are specified as non-front but are underspecified with respect to height and rounding. Thus, the only non-high vowels that occur in the affixal morphemes are /a/, /o/, and /e/, and their occurrence is conditioned by the harmonic feature of non-high root vowels, or the last non-high root vowel in the case of disharmonic roots (3.3.1.3) in the following way:

(79)   root   suffix
       /a/ /ä/   /a/
       /o/ /ö/   /o/
       /e/ /i/ /u/ /ü/   /e/

As can be seen from (79), when the root consists of only high vowels the vowel in affixes harmonizes as /e/. Although the vowel /i/ entirely shares the harmonic features of /e/ (a non-round non-low vowel), /u/ does not, because it is round. This shows that rounding harmony is localized in a subset of vowels, and must refer to height value: only mid vowels harmonize for rounding.

In the schematic representation of affixal morphemes throughout this grammar, underspecified non-high vowels are represented as *A*, while in the examples they are transcribed using their actual phonetic value (*a, o* or *e*). The examples below illustrate vowel harmony for the affixal morphemes -*wA* (ACC) and -*lA* (LOC).

(80)			ACC	LOC
a.	*'ana*	'boat'	*'ana-wa*	*'ana-la*
	kuliga	'snake'	*kuliga-wa*	*kuliga-la*
	abuga	'father'	*abuga-wa*	*abuga-la*
	zaŋgä	'chief'	*zaŋgä-wa*	*zaŋgä-la*
b.	*zolo*	'stone'	*zolo-wo*	*zolo-lo*
	ifokto	'bird cherry'	*ifokto-wo*	*ifokto-lo*
	tokö	'cloud'	*tokö-wo*	*tokö-lo*
	miondo	'gun'	*miondo-wo*	*miondo-lo*
c.	*neki*	'spring'	*neki-we*	*neki-le*
	kusige	'knife'	*kusige-we*	*kusige-le*
	adili	'net'	*adili-we*	*adili-le*
	ataxi	'spider'	*ataxi-we*	*ataxi-le*

3.3.2.2. Blocking the harmony

Importantly, the high vowel located in the last syllable of the root or in the suffixes is opaque. It blocks any further process of harmonization, with the result that the following non-high vowels share its value for harmonic features, and are represented as /e/ independently of the harmonic feature of the preceding vowels. Examples (81a) show the opaque vowel at the end of the root, and examples (81b) demonstrate the opaque vowel in the affixal morpheme.

(81)	a.	*ataxi-we*	'spider (ACC)'
		paki-we	'skillful (ACC)'
		talu-we	'birch tree (ACC)'
		agdi-we	'thunder'
	b.	*'ana-ŋi-we-ni*	'his boat' <boat-AL-ACC-3SG>
		zolo-ŋi-we-ni	'his stone' <stone-AL-ACC-3SG>

High vowels in the root that are not root-final do not block further harmony, cf.:

(82)   *aziga-wa*   'girl (ACC)'
        uga-wa   'voice (ACC)'
        činda-wa   'bird (ACC)'
        abuga-wa   'father (ACC)'

3.3.2.3. Violations

Vowel harmony in suffixes is subject to certain free and idiolectal variation. In some idiolects the harmony is completely suppressed and the only non-high vowel in suffixes is /e/. In other idiolects /e/ may appear instead of harmonic /o/ or /a/ only in the unstressed position (on stress see 3.6.3).

Rounding harmony is violated fairly frequently, so that in the pronunciation of certain speakers the round vowel /o/ may be replaced by /e/ (83a). This is especially common for clitics, cf. the Hortative clitic -*zA* (83b).

(83)   a.   *olokto-zeŋe-ni ~ olokto-zoŋo-ni*   'he will cook'
              <cook-FUT-3SG>

        b.   *olokto-zo ~ olokto-ze*   'cook (HORT)'

On the other hand, both height and rounding harmonies are sometimes attested in contexts when they would normally be blocked by the root-final high vowel (3.3.2.2), cf. *ofodi-e ~ ofodi-ö* 'plucked (PP)', *guala-ŋi-e-ni ~ guala-ŋi-ä-ni* 'he turned into' <turn-REP-PAST-3SG>. In these examples the fronting of the harmonizing vowels (/o/ → /ö/ and /a/ → /ä/) can be motivated by the assimilative influence of the preceding /i/.

Finally, there are some disharmonic affixes of the structure *CiCa* or *CaCi*, a list of which can be found in 3.5.2.2. The non-high vowel in these suffixes is fully specified as /a/ and does not correlate with the harmonic value of the preceding vowels. These affixes are opaque with respect to harmony because although they do not harmonize themselves, they trigger the harmonization of the following vowels. After the affix *CaCi* the following non-high vowels are realized as /e/ (84a), and after the suffixes *CiCa* they are realized as /a/ according to the general rule (84b).

(84)   a.   *koŋko-masi-zeŋe-ti*   'they will beat each other'
              <beat-REC-FUT-3PL>

        b.   *zolo-ziga-wa*   'stones'
              <stone-PL-ACC>   cf. *zolo-wo* 'stone (ACC)'
              jexe-ziga-wa   'songs'
              <song-PL-ACC>   cf. *jexe-we* 'song (ACC)'

3.4. Epenthesis

3.4.1. Vowel epenthesis

Vowel epenthesis applies in two cases: first, to prevent prohibited consonant clusters (3.4.1.1), second, to prevent word-final consonants (3.4.1.2). In both cases the epenthetic vowel is *A*, that is, a non-high harmonizing vowel. Since roots and affixes are normally vowel-final (3.5), epenthesis applies only after *n*-final roots (class II stems) and *n*-final affixes.

3.4.1.1. Word-internal epenthesis

3.4.1.1.1. Word-internal epenthesis and consonant deletion

In verbal inflection the epenthetic *A* is inserted after class II *n*-final stems before a consonant-initial affix to prevent prohibited clusters such as *nm*, *nk*, and *nj*, but is absent when the following morpheme begins with a dental consonant. As a result, the cluster "*n* + dental" is the only type of cluster possible at the morpheme boundary. A more detailed description of vowel epenthesis in verbal inflected forms, together with examples, is provided in 7.4 and 7.5. In certain verbal forms consonant deletion preventing a consonant cluster is preferred to vowel epenthesis. Deletion applies in the Imperative before the following consonant /j/ (85a), before the Imperfective affix *-si-* (85b), before the Purposive Converb affix *-lAgA-* (85c), and before the Reciprocal *-masi-* (85d).

(85) a. *i:-je (< i:n-je)*   'enter (IMP.2SG)'
     b. *dia-si- (< dian-si-)*   'talk (IM)'
     c. *i:-lege-ni (<i:n-lege-ni)*   'in order for him to enter'
         <enter-PURP-3SG>
     d. *dia-masi- (< dian-masi-)*   'talk to each other'
         <say-REC>

In the formation of the Causative (8.2.1.2) and the Diversative (8.2.2.5) variants are attested: either vowel epenthesis or *n*-deletion applies, depending on the idiolect.

It is noteworthy that for certain speakers word-internal epenthesis in verbal forms is generalized and reinterpreted as part of the stem. For these idiolects the vowel *A* appears after the stem-final /n/ in all environments, and accordingly the stem moves to the morphonological class I (7.1).

For personal pronouns, the epenthetic *A* is inserted after *n*-final stems before the Accusative marker *-wA*, since the cluster *nw* is disallowed. The epenthetic vowel may in this case be realized as /a/ in certain idiolects, cf.:

(86)	*sin-e-we*	~	*sin-a-wa*	\<you-0-ACC\>
	min-e-we	~	*min-a-wa*	\<me-0-ACC\>

According to Benzing (1956: 108), the vowel *A* in the Accusative form of the personal pronouns is a reflex of the old (Partitive) case affix; however, even if this is correct, on the synchronic level it is better analyzed as epenthetic.

In the nominal, adjectival, and numeral declensions, the epenthetic vowel is not present because most case markers begin with dental consonants, and the cluster "*n* + dental" is legitimate. The Accusative suffix attached to class II nouns demonstrates the historical sound change by which the stem-final /n/ was lost and the suffix-initial /b/ was sonorized: *n* + *b* > *m* (see 3.2.1.3).

3.4.1.1.2. Epenthesis in loan-words

An epenthetic vowel prevents word-initial consonant clusters in Russian loan-words (1.5.2.2.1). The quality of this vowel is typically conditioned by the quality of the vowel in the first syllable, although variations are also possible, cf.:

(87)	Russian		Udihe
	xleb	'bread'	*xeleba, xelebe*
	klub	'club'	*kulube*
	kniga	'book'	*kiniga*

Word-medial epenthesis does not apply to recent borrowings: *pampuška* 'bun' (< Russian).

3.4.1.2. Word-final epenthesis

Word-final epenthesis is present after uninflected *n*-final verbal stems (88a) and in the Reflexive pronoun (88b).

(88)	a.	*dian-a*	\<say-0\>
		gun-e	\<say-0\>
		digawan-a	\<feed-0\>
	b.	*men-e*	\<REF-0\>

The verb *i:n-* 'enter, come' loses the stem-final consonant in the bare form (*i:* < *i:n* 'enter'). This seems to be motivated by the fact that the stem contains a bimoraic long vowel, so the requirement for the word to be minimally bimoraic (3.3.2) is satisfied.

Nouns, adjectives, and numerals lose the word-final /n/ in the bare forms (4.1.1.2), so in this case consonant-final words are prevented not by vowel epenthesis but by consonant deletion.

An epenthetic vowel is historically present in consonant-final loan-words: *Iwan-a* 'Ivan', *Si Säŋ-a* 'Si San', *magazin-a* 'shop', *metr-a* 'meter' (see 1.5).

3.4.2. Consonant epenthesis

Consonant epenthesis is not very typical, because Udihe freely allows bivocalic and trivocalic clusters (3.2.2). In some idiolects an epenthetic /w/ may be inserted between the vowel-final verbal stem and the Passive marker -*u*-, although unepenthetisized forms are also possible (8.2.1.5):

(89) *zawa-w-u-* <take-0-PAS> or *zawa-u-* <take-PAS> 'be taken'

3.5. Morpheme structure

All morphemes fall into three morphological classes: roots, affixes (suffixes), and clitics (enclitics).

3.5.1. Roots

Roots are normally vowel-final (the so-called I class stems) or *n*-final (class II stems). Class II stems may be augmented by an epenthetic vowel in certain environments (3.4.1). Further information on the inflectional difference between the two classes can be found in sections 4.1.1 and 7.1. Nominal and adjectival roots appear in a bare form in the Nominative Singular, and verbal roots have the bare form when they co-occur with the negative verb (7.1.5). Grammatical words are not discussed in this section.

Native (not borrowed) roots that have more than three syllables are absent; polysyllabic stems are always the result of a particular derivational process, either synchronic or historical. The root types of native words are presented below, according to their syllabic structure. Examples are only given for nominal and verbal roots; non-derived adjectives and adverbs follow the pattern of nouns.

3.5.1.1. Monosyllabic roots

The types of monosyllabic roots are: (i) roots equal to an open syllable with a bimoraic vowel (90a); (ii) *n*-final roots (90b), and (iii) verbal roots equal to an

open syllable with a monomoraic vowel (90c). In the latter type the vowel undergoes prosodic lengthening in certain environments (2.3.4).

(90)   a.   (C)V:, (C)'V

nouns		verbs	
ja:	'cow'	*su:-*	'die out'
mo:	'tree'	*te:-*	'sit'
se:	'year, kind'	*b'a-*	'get, find'
d'a	'cotton wool'		

b.   (C)Vn, (C)V:n

nouns		verbs	
xu(n)	'smell'	*gun-*	'say'
xo:(n)	'top'	*i:n-*	'enter'

c.   (C)V

verbs	
bu-	'give'
wa-	'kill'
sa-	'know'

3.5.1.2. Bisyllabic roots

Bisyllabic roots may be vowel-final (91) or *n*-final (92), and have various syllabic structures:

(91)   a.   (C)VV

nouns		verbs	
sue	'thin branch'	*ŋua-*	'sleep'
xua	'flower'	*deu-*	'get tired'

b.   (C)VC(C)V

nouns		verbs	
dili	'head'	*susa-*	'escape'
zeli	'barn'	*jexe-*	'sing'
činda	'bird'	*xukti-*	'jump'

c.   (C)V:V, (C)'VV

nouns		verbs	
g'ai	'crow'	*k'ai-*	'brake (skin)'
ku:i	'strength'	*ze:u-*	'sharpen'

d.   (C)V:C(C)V, (C)'VC(C)V

nouns		verbs	
e:xi	'frog'	*ča:la-*	'want'
ni:kte	'fern'	*l'oso-*	'hang'
k'olo	'mittens'	*b'agdi-*	'meet'

e.   (C)VC(C)V:, (C)VC(C)'V

nouns		verbs	
od'o	'grandfather'	*ili:-*	'stand'
sikie	'evening'	*metu:-*	'finish'
abdä:	'leaf'		

(92)   *n*-final roots

nouns		verbs	
xoto(n)	'city'	*taun-*	'count'
ami(n)	'father'	*ñuxan-*	'dive'
kakt'a(n)	'half'	*dian-*	'say'

3.5.1.3. Trisyllabic roots

Trisyllabic roots have the following structure:

(93)   a.   (C)VVV, (C)V'VV

nouns		verbs	
ku'ai	'ear'	*kuai-*	'build a dwelling'

b.   (C)VVC(C)V, (C)V:VC(C)V, (C)'VVC(C)V

nouns		verbs	
cuanza	'kettle'	*xaunta-*	'ask'
mä:usa	'gun'	*sauli-*	'offer (food)'

c.   (C)VC(C)VV, (C)VC(C)V:V, (C)VC(C)'VV

nouns	
sukpai	'name of a river'
ad'au	'twins'
in'ei	'dog'

d.   (C)VC(C)VC(C)V

nouns		verbs	
emende	'witch'	*olokto-*	'cook'
mafasa	'old man'	*caŋala-*	'sing'
zaŋlaŋa	'cockroach'		

e. (C)V:C(C)VC(C)V, (C)'VC(C)VC(C)V

da:niŋa 'paternal aunt'
i:bene 'Japanese'
ñ'ädiga 'youngest child'

Non-derived native trisyllabic roots with a bimoraic vowel in the second or third syllable seem absent. Non-derived class II roots are absent as well.

3.5.1.4. Polysyllabic roots

Native non-derived roots that have more than three syllables are absent. Words borrowed from Chinese may contain two biconsonantal vowel clusters, or a cluster and two further syllables. In conformity with the analysis of vowel clusters as heterosyllabic (3.2.2.2), such words may be interpreted as having four syllables. In practice, however, vowel clusters in Chinese borrowings are normally pronounced as diphthongs (3.2.2.2), so the words cited below may be considered trisyllabic or bisyllabic.

(94) *guaŋčou* 'spade'
   guaizima 'Himalayan bear'
   gindaula 'dragonfly'
   säŋguaza 'melon'
   loulou 'maternal grandmother'

3.5.2. Suffixes

Suffixes are monosyllabic (3.5.2.1), bisyllabic (3.5.2.2), or very rarely trisyllabic (3.5.2.3). Typically they attach to the root directly. In certain cases vowel or, less frequently, consonant epenthesis applies (3.4.2). Some (vowel-initial) suffixes influence the quality or quantity of the final segment of the root; these are addressed in 3.5.2.4.

3.5.2.1. Monosyllabic suffixes

The following types are possible.
   (i) Suffixes that consist of a single vowel V. There are several homonymous suffixes:

(95) *-i* 1SG; REF.SG; ADJ; PRP
   -u 2PL; 1PL.EX; PAS; CAUS; N; ADJ
   -o PP (for *u*-final verbs)
   -e PP (for *i*-final verbs)

(ii) Suffixes CV where the vowel is high (96a) or is *A*, that is, a harmonizing non-high vowel (96b). This is the most frequent type.

(96) a.

-li	PROL; INC; V; ADJ	*-ti*	3PL; ADJ
-du	DAT	*-zi*	INST
-ni	3SG	*-si-*	IM; V
-ŋi	V; AL	*-gi-*	V; REP
-di	V	*-mi*	INF; ADJ
-xi	ADJ; N	*-fi*	1PL.IN; ADJ
-ki-	EXPR; PAST (class II verbs)		

b.

-wA	ACC	*-f'A*	N
-zA-	SUBJ; N	*-mA*	ADJ; V; N; IN
-nA-	DEST; V; PL; DIR	*-sA*	EXP; N; ADJ
-s'A	N; ADJ	*-tA*	PERM; DIST
-sA	N; ADJ	*-ŋ'A*	N
-f'A	N		
-lA	LOC; V; N; ADJ; SING		
-kA	EXPR; PERF (class II verbs)		
-gA-	PERF (after high vowels)		

Two suffixes of this type contain a long vowel, although generally long vowels are not typical of suffixal morphemes:

(97)

-ŋA:	N
-ŋie-	IC

The perfect affix *-ge-*, which only attaches to *i-* or *u-*final verbal stems, lacks harmonic variants, because the harmony is blocked by the stem-final high vowel (3.3.2.2).

(iv) Only one suffix of the structure CVC is consonant-final:

(98) *-wAn-* CAUS

(v) Suffixes CCA (99a) or CCV where V is a high vowel (99b).

(99) a.

-kcA-	DUR; INT	*-ptA*	DEC; N
-ndA-	SEM	*-ntA*	N
-ktA-	DIST; N; ADJ; V	*-mpA*	N; ADJ; V

b.

-kpi	DEC	*-kči*	DEST
-ŋku	PL	*-ktu*	RES; N
-mni	N	*-mzi*	N
-nti	N; ORD	*-mti*	ADJ

-ntu	ADJ		-pti	N
-ŋtu	ADJ		-gbi	V

In some suffixes the high vowel and *A* may alternate:

(100)	-gA / -gu	N		-ŋkA / -ŋku	N
	-kA / -ku	N		-gdA- / -gdi /-gdu-	V

3.5.2.2. Bisyllabic affixes

Bisyllabic suffixes may be of the following types:
  (i) CACA (101a) or C(C)VC(C)V where V is a high vowel (101b). As can be seen from (101b), only two identical high vowels may be present within such a suffix.

(101)	a.	-zAŋA-	FUT	-wAlA	ADJ
		-ñAñA	ADJ	-lAgA-	PURP

	b.	-tigi	LAT	-mugu	N
		-digi	ABL	-dugu	N
		-ligi	ADJ	-dili	PROL
		-ŋisi-	V	-lisi-	CC
		-xiktu	ADJ	-ptigi	ADJ

The two suffixes of the structure CVV are:

(102)	-mu:i	DES; ADJ	-ŋ'ai	N

  (ii) Bisyllabic suffixes of the structure C(C)VC(C)e, where V corresponds to a high vowel. As argued in 3.3, a high vowel is harmonically neutral and prevents a harmonic feature from spreading further, so after the high vowel all non-high vowels are realized as /e/. The alternation /e/ ~ /i/ or /e/ ~ /u/ is frequently observed in this type (103b) since the suffix-final vowel tends to assimilate to the first vowel of the suffix.

(103)	a.	-nige	N	-dule	LOC
		-mule	N; V	-muse-	COND
		-fule-	V	-kule-	V
		-fine-	V		

	b.	-gdugu / -gduge	N	-tigi / -tige	N
		-ptili / -ptile	N	-gbile-	V

(iii) Suffixes C(C)VC(C)V where one of the vowels is the high vowel /i/ while another is /a/. The vowel /a/ is present either in the first syllable of the suffix (104a), or in the second (104b). These suffixes are exceptional with respect to vowel harmony, firstly because the non-high vowel fails to harmonize, and secondly because in type (104b) it triggers the harmonization of the following vowels as /a/ (3.3.2.3). The reason for the exceptionality of these suffixes is not entirely clear. One possibility is that the adjacent consonant exerts an assimilatory influence on the non-high vowel: all the suffixes in question have a labial, velar, or uvular consonant adjacent to a non-high vowel, and this may condition its *a*-like pronunciation.

(104) a. | *-wasi-* | DIV | *-masi-* | REC |
| *-ŋati* | N | *-laŋki* | ADJ |

b. | *-ziga* | DIM; PL | *-niŋa* | COM; COL |
-ndima	ADJ	*-tuŋa*	COL
-gdiga	N	*-čiŋa*	N
-gdig'a	ADJ		

(iv) Vowel-initial suffixes VCV or VV:

(105) | *-uxe* | ADJ | *-Au* | ADJ |
-use	ADJ	*-ini*	3SG
-iti	3PL	*-uxi*	LAT
-isi-	PC	*-ugu*	N
-uze	N		

3.5.2.3. Trisyllabic suffixes

Trisyllabic suffixes are exceptional; only three examples are found:

(106) | *-ndimali* | ADJ |
| *-n'Ause* | ADJ |
| *-ñAñAñA* | ADJ |

3.5.2.4. Consonantal suffixes

Suffixes that consist of one consonant are not typical. There are only two exceptions: the *-k* suffix of the Expressive Past (7.10.4.1), and the *-m* suffix of (ideophonic) manner adverbs (10.1.3.1.6, 10.1.3.2.2). Both occur only word-finally, and in both cases the absence of the final vowel may be conditioned by the expressive character of the word (cf. 3.1.1).

3.5.2.5. "Autosegmental" morphemes

Autosegmental morphemes are realized as phonological alternations in the base to which they attach: they change the length or the phonation type of the stem-final vowel. These are the following morphemes:

(i) The Past tense conditions a lengthening of the stem-final non-high vowel (see 7.1.2 for more detail).

(ii) The Perfect conditions laryngealization of the stem-final non-high vowel (7.1.3);

(iii) Some nominal and adjectival derivational affixes condition laryngealization of the stem-final non-high vowel: the nominal suffixes (')-*i* (5.1.1.6) and –(')*u* (5.1.2.11), and the adjectival suffix and the suffix of converted nouns (')-*use* (6.4.1.4.1). The same applies to the Perfective same-subject converb in (')-*si* (7.5.2.3.2).

(iv) The disjunctive element -*As(i)* is contracted to the final vowel of the stem according to the same rules as the Past tense marker.

Only short vowels undergo changes conditioned by autosegmental morphemes. When the stem-final vowel is underlyingly long or laryngealized, it always remains unchanged. However, in the Perfect a long vowel changes into a laryngealized vowel, cf.:

(107) *b'a-* 'get, find' *b'a* 'got' <get.PERF>

  b'a-ni 'got' <get.PAST-3SG>

  te:- 'sit' *te:-ni* 'sat' <sit.PAST-3SG>

  t'e 'have sat' <sit.PERF>

3.5.3. Clitics

3.5.3.1. Definition

Clitics (enclitics) are characterized by the following properties, which differentiate them from independent words:

(i) Clitics do not bear a separate phonological stress, and are always unstressed.

(ii) Clitics are phonologically bound to the preceding word, and cannot be separated from it under any conditions.

(iii) Clitics enter the domain of vowel harmony, and therefore the usual harmonic conditions are imposed on the vowels within them (see 3.3). For example, the additive focus clitic -*dA* 'and, too, as well' (12.1.1.3) is possible in the following three phonetic forms:

(108) *tege-de*   'and the gown'
      moxo-do   'and the cup'
      aka-da   'and the back'

(iv) As argued in 2.2.3.2, the clitic prevents the final consonant from palatalization after the loss of the final /i/. Since the consonant located at the right edge of the phonological word is normally palatalized after /i/ reduction, this shows that the phonological word boundary is located not before but after the clitic.

Clitics differ in the following ways from other bound morphemes (suffixes):

(i) As distinct from regular affixes containing non-high vowels, clitics are opaque with respect to stress. Normally, in a word without bimoraic vowels the stress falls on the rightmost non-high vowel (109a), see 3.6.3; however, in a word followed by a clitic the stress falls on the syllable preceding the clitic (109b):

(109) a. *abuga-l'a*   'at the father (LOC)'
          tada-w'a   'arrow (ACC)'
       b. *abug'a-da*   'and the father'
          jaz'a-ta   'and of course'

(ii) Clitics do not count as syllables with respect to other stress-placement rules. A final syllable with a high vowel is unstressed (extrametrical) if it belongs to an inflectional morpheme (3.6.3.3). Importantly, it remains unstressed if followed by a clitic. This can clearly be seen from the fact that the unstressed high vowel /i/ undergoes a reduction before the clitic just as it does word-finally (2.1.5.3), cf.:

(110) *tada-w'a-n(i)-de* 'and his arrow'   <arrow-ACC-3SG-FOC>
      olokt'o-m(i)-do 'and cooking'   <cook-INF-FOC>

This fact supports the analysis of clitics as morphemes invisible to stress rules.

3.5.3.2 Inventory

From a functional point of view, clitics typically express focus and are treated in the chapter on particles (Chapter 12). An important structural restriction on them is that they must be maximally one syllable long. The typical structure of a clitic is CA, rarely CCA. A fairly exhaustive list of clitics is presented below:

(111) *-dA*   additive focus (12.1.1.3), Indefinite pronouns (9.6.1)
      -kA   focus (12.1.1.11.1), Indefinite pronouns (9.6.2)
      -nA   contrastive focus (12.1.1.5)

-*lA*	contrastive focus (12.1.1.7)
-*gdA*	contrastive focus (12.1.1.8)
-*zA*	Hortative (12.1.2.4.2)
-*sA*	focus (12.1.1.11.2)
-*gA*	focus, Hortative (12.1.1.11.2, 12.1.2.4.2)
-*tA*	focus (12.1.1.11.2)
-*gu*	Indefinite pronouns particle (9.6.4.3)

Certain focus clitics are easily combined. Remarkably, when two monosyllabic clitics are combined this leads to the emergence of an independent word (particle). It receives a separate phonological stress on the second syllable, and loses the ability to harmonize. All vowels are represented by /e/.

(112) *kede*   Indefinite pronouns particle (9.6.4.1)
       deke   Indefinite pronouns particle (9.6.4.1)
       gdele focus particle (12.1.1.8)
       tene   focus particle (12.1.1.5)
       dele   Indefinite pronouns particle, focus particle (9.6.4.2, 12.1.1.6)

3.6. Prosodic structure

3.6.1. Syllable

The most important syllable constraint operative in Udihe is the prohibition of tautosyllabic consonant clusters. This constraint has two surface consequences. First, it means that triconsonantal clusters are totally banned (cf. 3.2.1). The only word that exhibits a word-initial consonant cluster in certain idiolects is *drug'afa* 'in the middle' (< *durug'afa* < *dulug'afa*). Second, it ensures that consonant clusters are not found at word edges. On the other hand, Udihe easily tolerates onsetless syllables both word-initially and word-medially, with the result that heterosyllabic vowel clusters are allowed. On arguments in favor of the bisyllabic analysis of vocalic clusters see 3.2.2.2.

Long and laryngealized vowels may be present within the same types of syllable as short vowels. The structure of syllables acceptable in Udihe is as follows:

(113) a. V   V: 'V
       b. CV   CV: C'V
       c. VC   V:C   'VC
       d. CVC   CV:C   C'VC

Syllables (113c) and (113d) do not occur word-finally (cf. 3.1.1); otherwise there are no restrictions on the position of syllables within a word.

Syllable boundaries need not coincide with morpheme boundaries. Examples of syllabification are as follows (syllable boundaries are shown with dots, morpheme boundaries with hyphens):

(114) *ga.lak.ta.-za.ŋa.-ni*   'he will seek' <seek-FUT-2SG>
       te.lu. ŋu.si-k.ce.-i   'he wants to tell' <tell-INT-PRP>
       e.u.-wo:.-ni   'he came down' <come.down-PAST-3SG>
       je.-u.-de   'something' <what-IND>
       ñ'a.u.la   'youth'
       a:n.ta   'woman'

3.6.2. Moraic and foot structure

Syllables with long and laryngealized vowels pattern together with respect to stress assignment (3.6.3), and differ from syllables with short vowels. This motivates the analysis of long and laryngealized vowels as bimoraic. So syllables (C)V:, (C)'V, (C)V:C, (C)'VC have two moras, while syllables (C)V and (C)VC have one mora. Since the coda consonant does not project a mora, the syllable (C)VC does not count as heavy (bimoraic) and the syllables (C)V:C and (C)'VC are not counted as extraheavy.

The analysis of long and laryngealized vowels as bimoraic is confirmed by the structure of the minimal word. The minimal content word in Udihe is monosyllabic and bimoraic: (C)V: or (C)'V, monomoraic content words (C)V being absent (see 3.5.1 on the structure of roots). Such a situation is conditioned by the universal requirement for the minimal lexical word to be exactly one foot long, and for the foot to have a binary structure under a syllabic or moraic representation (McCarthy and Prince 1995). The foot in Udihe is binary on the moraic level, therefore the minimal word must be bimoraic. If two moras are assigned to long and laryngealized vowels, one mora is assigned to short vowels, and the coda consonant is treated as non-moraic, the absence of the monomoraic words CVC and CV is explained. It also explains quantitative variations in the stem, the so-called "prosodic lengthening", namely, the lengthening of short vowels in monosyllabic structures (2.3.4). The only monomoraic monosyllabic stems are *n*-final verbal stems (3.5.1); however, in the bare form such a stem is augmented by an epenthetic vowel (3.4.2).

Grammatical words can correspond to one monomoraic syllable CV. The possible reason for their exceptionality is that they typically constitute a single phonological (prosodic) word with the word that follows them.

(115) *ña* additive focus (12.1.1.4)   *su* 'you (PL)'
       bi 'me'   *bu* 'we (EX)'
       si 'you'   *ni* 'who'

According to the stress placement rules (3.6.3.2) the final affixal syllable with a high vowel is extrametrical. The quantitative variations in the stem ("prosodic lengthening", 2.3.4) strengthen this analysis, because the root vowel lengthens to provide a second mora before a word-final affixal syllable with a high vowel. Cf. (116a), which demonstrates prosodic lengthening in bare monosyllabic stems, (116b) where the lengthening is absent because the word is bisyllabic and the second mora is provided by the second syllable, and (116c) where the word is bisyllabic, but the root vowel is still lengthened. This follows from the fact that the final high vowel does not project a mora, so the root vowel must lengthen to preserve the bimoraic structure.

(116) a.   *wa:*   'kill'
            bu: 'give'
       b.   *wa-kca*   'hunt'   <kill-DUR>
            bu-ze   'he will give' <give-SUBJ>
            wa-za   'he will kill' <kill-DUR>
       c.   *wa:-mi*   'killing'   <kill-INF>
            bu:-mi   'giving'   <give-INF>

3.6.3. Word stress

According to our preliminary analysis, Udihe has a quantity-sensitive stress system with a right-headed unbounded foot constructed from left to right. In the examples below, the (primary) stress is indicated by the symbol '.

3.6.3.1. Character of stress

There have been several attempts to analyze stress in Udihe. According to Schneider (1936: 92) and Sunik (1968: 213), stress in the Khor dialect falls on the first and the last syllable. The initial stress is dynamic, whereas the final stress is associated with a higher pitch. Schneider also notes that if a bisyllabic word is followed by a bisyllabic affix, dynamic stress is absent, but the pitch accent falls on the second and the last syllable: *tad'a-tig'i* 'to the arrow (LAT)'.

The same analysis is basically repeated in Simonov (1988: 77). However, Simonov states that the initial stress is normally only present in polysyllabic words. In bisyllabic words it is hardly noticeable, and may be completely absent: *om'o* and *'om'o* 'one.' As for the final stress, Simonov's conception is excessively complicated, because he relies crucially on his non-standard classification of vowels. The basic point, however, is as follows. The so-called "final stress" does not automatically fall on any final vowel in the word, but is rather associated with the rightmost long vowel ("intensive" and "intensive tense" vowels in Simonov's terms): *gel'e:ni* 'he called' <call-PAST-3SG>.

In our material from the modern Bikin dialect we do not have any particular evidence for a dynamic stress on the first syllable, although it is not excluded that the first syllable in the word is marked by a greater loudness and intensity of sound than the other syllables. Besides, in expressive contexts the first vowel may receive the emphatic stress (3.6.5). The so-called "final" stress does not indeed always fall on the final vowel, its position is discussed in 3.6.3.2. This stress will be referred to as the "primary stress". The phonetic characterization of the primary stress is complicated. We will not discuss this matter here, and only note that it may be associated with greater intensity and sometimes with higher pitch, but not in every word: for example, sentence-final words do not demonstrate pitch raising. In addition, stress involves partial lengthening. According to the experimental data of Baicura (1989–91), in structures CVCV the second short (stressed) vowel is 53–90% longer than the first. He also notes that in polysyllabic words with short vowels the longest is typically the vowel of the penultimate syllable. This is because, given the frequent extrametricality of the final syllables (3.6.3.3), this vowel often bears the main stress.

Polysyllabic words also seem to have a secondary stress that is less intense than the primary stress. When the primary stress does not fall on the last syllable, the last syllable may receive the secondary stress (117a). Non-(primary) stressed bimoraic vowels also seem to bear the secondary stress (117b). The symbol , is here employed for the secondary stress.

(117) a.   '*a:n.ta.zi.g, a*   'women (PL)'

          t"o.si.we.ne.ke.z,em(i)   'I will make (them) dream'

          <dream-CAUS-INTN-SUBJ-1SG>

     b.   *t,'o.s'ie.mi*   'I was dreaming'

          <dream-PAST-1SG>

However, the precise rules for secondary stress are unclear, and we will not discuss this question here.

3.6.3.2. Stress-placement rules

The general rule for the assignment of primary stress is that it falls on the rightmost bimoraic vowel, otherwise the final vowel is stressed. Thus, stress on the final vowel is the default. Examples (118a) show words without bimoraic syllables where stress falls on the rightmost syllable. Examples (118b) demonstrate words with one bimoraic long vowel in a non-final position that bears the stress. In (118c) we present words with a non-final, stressed laryngealized vowel. Examples (118d) demonstrate that the closed syllable CVC behaves in the same way as the open syllable CV with respect to stress assignment: neither are stressed unless word-final. The facts in (118d) and

(118d) are the primary evidence for the bimoraicity of laryngealized vowels and the non-moraicity of the coda consonant, respectively. Finally, the examples (118e) show that vowel clusters do not constitute a bimoraic syllable (see also 3.2.2.2).

(118) a.   *uta.w'a*   'that (ACC)'
         a.na.n'a   'long ago'
         ma.ma.sa.l'a   'old woman (LOC)'
         o.mo.m'o   'one (ACC)'

     b.   *'a:n.ta.ẓi.ga*   'women (PL)'
         e.m'e:.me.i   'have come' <come-PP-ACC-2SG>
         s' u:.le.i   'ill, sick'

     c.   *b' 'a.ta.wa*   'boy (ACC)'
         kʼ'o.lo.lo   'in the mitten (LOC)'

     d.   *dog.b'o*   'night'
         zab.da.l'a   'grass-snake (LOC)'
         e.men.d'e   'witch'
         niŋ.k'a   'Chinese'
         li.fak.t'a   'mud'

     e.   *na.uŋ.za.k'a*   'boy'
         zu.e.z'e   'table'

When the word contains more than one bimoraic syllable, the stress falls on the rightmost bimoraic syllable. However, this situation is rare, because the root typically contains no more than one bimoraic syllable, while most morphemes do not have bimoraic vowels at all (see the morpheme structures in 3.5). Two bimoraic vowels are present in the Past and Perfect verbal forms if the root initially has a bimoraic vowel, because the Past and Perfect markers cause a lengthening or laryngealization of the root-final vowel, respectively (3.5.2.4).

(119) *te:.g'iek*   'he sat'   <sit-REP-PAST-EXPR>
     su:.s'i:.ni   'he extinguishes'   <extinguish-3SG>
     s'a.i.d'a:.ni   'he salted'   <salt-PAST-3SG>

As argued in 3.5.3.1 clitics are outside the domain of stress assignment.

3.6.3.3. Extrametrical syllables

The assignment of stress also takes into account the character of the syllable. Crucially, word-final syllables with high vowels (/i/ and /u/) are extrametrical with respect to stress assignment, that is, they do not bear the stress. In the absence of bimoraic vowels the stress falls on the penultimate syllable, as demonstrated in the examples below.

(120) *a.zi.g'a.ni*   'his girl'

       zo.m'i.mi   'stealing'   <steal-INF>

       to.kö.w'o.ni   'his cloud'   <cloud-ACC-3SG>

       te.ge.w'e.u   'your gown'   <gown-ACC-2PL>

       a.i.si.gi.ze.ŋ'e.ni 'he will mend'   <mend-REP-FUT-3SG>

       sa.kin.de.z'e.mu   'we will clap'   <clap-SEM-SUBJ-1PL.EX>

The unstressed character of the word-final high vowel explains the fact that in fast speech it often undergoes complete reduction (2.1.5.3). However, in more distinct pronunciation (the "expressive style", in Kormušin's terms), the word-final high vowel may be lengthened (2.1.5.2) and in this case, of course, it is stressed in accordance with the general stress rule (3.6.3.2).

(121) *e.de.i.si.n'i:*   'when, if'

      bi.si.n'i: 'he was'   <be-PAST-3SG>

      se.u.ti.ge.n'i: 'his nut'   <nut-3SG>

Importantly, the extrametricality of the final syllables with high vowels is only restricted to inflectional affixes, while the final vowel within the root (the bisyllabic or trisyllabic root) is stressed in the regular manner.

(122) *di.l'i*   'head'

      de.gu.m'u   'poles for drying fish'

      dog.d'i   'listen'

      a.di.l'i   'net'

The contrast in stress placement between, for example, *a.di.l'i* 'net' and *zo.m'i.mi* 'stealing' <steal-INF> shows that it is indeed the status of the morpheme (root vs. affix) that accounts for the extrametricality/non-extrametricality of the rightmost syllable.

When the word ends with two syllables containing high vowels they are both extrametrical with respect to stress:

(123) *am.b'a.tigi*   'to the evil spirit (LAT)'

      bom.b'o.li.gi   'round' <ball-ADJ>

      a.zi.g'a.di.gi   'from the girl (ABL)'

      b'u-ini   'he gives' <give-3SG>

This again applies only to affixes, cf. *a.di.l'i*   'net'. However, in the full pronunciational style the final high vowel may be associated with a secondary stress, cf.:

(124) *am.b'a.tig, i*   'to the evil spirit (LAT)'

      a.zi.g'a.di.g, i   'from the girl (ABL)'

Exceptionally, the Dative affix *-du* typically bears the stress: *o-ď u* 'here' <this-DAT>, *zugdi-d'u* 'in the house' <house-DAT>.

3.6.3.4. Alternation triggered by stress

Stressed and unstressed vowels demonstrate a different behavior in certain phonological processes. As was mentioned above (2.1.5.3), an unstressed final high vowel may be deleted while a stressed final high vowel is always preserved. Stress plays a certain role in the process of high vowel contraction (2.3.1).

3.6.3.5. Reduplications and stress

Like most Tungus-Manchu languages, Udihe is rich in (ideophonic) reduplicated adverbs (10.1.3.2). They appeared as a total reduplication of ideophonic stems, but the corresponding non-reduplicated variant is only attested for certain words in the modern language. In all cases both components of the reduplicated word bear a separate phonological stress according to regular rules. They are usually monosyllabic or bisyllabic; the latter type is illustrated below.

(125) *bokč̣i-bokč̣i ~ bokč̣om-bokč̣om*   'wrinkled'
       wekt'e-wekt'e   'together, in a pile'
       dandaľ-dandaľ   'on end (of hair)'
       leŋk'e-leŋk'e   'dangling'
       liŋg'a-liŋg'a   'sticky'
       pic'e-pic'e   'into smithereens'

Reduplicated ideophones will be treated as lexical items that consist of two phonological words. They are written and glossed with a hyphen throughout the grammar.

3.6.4. Sentence stress

Typically, the intonation falls at the end of the sentence. However in yes-no questions and disjunctive questions (23.1.2, 23.1.4) intonation rises considerably on the last word of the sentence. When the last word of a sentence is prominent, this may be expressed by a rising pitch on the stressed vowel. In the examples below an acute accent indicates a rising pitch.

(126) a. *Stepana*   *eme-gi-e-ni.*   *Ni*
          Stepan   come-REP-PAST-3SG   who

> *eme-gi-e-ni?*   *Stepán?*
> come-REP-PAST-3SG Stepan
> 'Stepan has come. Who has come? Stepan?"
>
> b. *Bi sin-du*   *imasi-zé-mi?*
>   me you-DAT   tell.tale-SUBJ-1SG
>   'Shall I tell a tale to you?'

3.6.5. Emphatic stress

Emphatic stress is marked by a rising pitch on the first vowel of the corresponding word. If this vowel is originally short it may receive a partial secondary lengthening, and therefore bear the primary word stress. So the stress may shift from its regular position. The vowels that undergo partial secondary lengthening are shorter than the underlying long vowels, but longer than their short counterparts. Words that bear the emphatic stress are capitalized in the translation below.

(127) a. *Si jexe-mi*   *n' 'ó:ni (< n'on'i:)?*
     you sing-INF   can.2SG
     'CAN you really sing?'

    b. *Sagdi-zi ule-zeŋe-f(i),*   *s'á:gdi (< sagd'i)*
      big-INST dig-FUT-1PL.IN big
      kuliga.
      snake
      'Let us dig more, the snake is BIG.'

    c. *Bi 'o:no (<on'o)* *bagdi-ze-mi?*
      me how   live-SUBJ-1SG
      'HOW should I live?'

    d. *Sugzä-wa i:-le-de*   *e-si-ni*
      fish-ACC what-LOC-IND   NEG-PAST-3SG
      wa:, 'á:nči (<anč'i) sugzä.
      kill no   fish
      'He hasn't caught fish anywhere, NO fish.'

    e. *Adi-adi*   *zali* *t'á:pči (<tapč'i).*
      how.many-how.many barn full
      'Several barns are FULL.'

"Stylistic variations" in the length and quality of the word-final /i/ (2.1.5) are also conditioned by emphatic stress. The lengthened final /i/ bears the primary stress.

In general, the emphatic stress and the presence of different styles of pronunciation make the identification of stress exceedingly complicated.

Morphology

Udihe exhibits a rather high degree of morphological synthesis. The inflectional grammatical classes have more than one morpheme per word. A number of grammatical morphemes are semantically equivalent to separate lexical items in the European languages, cf., for example, *wakca-na-mu:i-* 'want to go to hunt' where *-nA-* is the Directive verbal suffix which indicates movement in order to accomplish the action specified by the verbal stem, and *-mu:i-* is the Desiderative affix. Yet a "polysynthetic" combination of a large number of morphemes within one word is not possible. Theoretically, the nominal word may include at most six morphemes (the root, the derivational affix, the Alienable Possessive suffix, the Possessive affix, the number affix and case affix), and the verbal word may include six or seven morphemes (the root, three or four derivational affixes, tense/mood, and agreement). In practice, however, such cases are rarely found, and the noun normally contains no more than three or four morphemes, and the verb contains no more than five morphemes.

The morphological structure of Udihe is characterized by a certain level of agglutination. Typically, the words can be easily divided into a linear sequence of distinct morphs, each of which has a fairly consistent shape and a single function. The agglutination, however, is not absolute; in many cases the boundaries between the morphemes are not clear-cut, and several grammatical meanings are combined within one "portmanteau" morph. This is mostly due to the various morphological alternations described in 2.3. One example is the frequent conflation of the *i*-final stem or affix with the following *i*-initial morpheme. Thus, the 1st person Possessive affix *-i* (e.g. *anda* 'friend', *anda-i* 'my friend') conflates with the preceding /i/ within the Lative inflection *-tigi* (*anda-tigi-i* <friend-LAT-1SG> → *anda-tigi:* 'to my friend'). This creates a 'portmanteau' morph *-tigi:* which indicates both the Lative and the 1st person singular. Some morphemes, however, have several grammatical functions, and this is not a result of morphonological alternations (at least at the synchronic level). For example, the suffix (')-*si* marks both the Perfective Converb and the same-subject switch-reference relation (7.5.2.3.2).

The only type of affixes found in Udihe are suffixes, that is, all bound morphemes follow the root. Although synthesis predominates in the expression of grammatical meanings, a few analytical constructions are present. Certain aspectual, temporal, and modal categories are formed with the auxiliary verb (see Chapter 7). Other morphological processes are reduplication,

compounding and conversion. Overall, incorporation is not typical; some incorporation-like phenomena are addressed in 6.4.1.2.2, 8.3, and 10.1.3.1.1.

The major open word classes (nouns, verbs, adjectives and adverbs) can be easily distinguished by morphological and syntactic criteria.

Chapter 4
Noun inflectional morphology

Nouns are characterized by the grammatical categories of number, case, and possession. Syntactically they function as arguments (Chapter 14), adjuncts (15.3), modifiers (Chapter 13), or predicates in copular constructions (Chapter 17). The absolute majority of nouns in Udihe have the prototypical nominal meaning: they denote physical objects, either countable entities or uncountable mass notions. Very few nouns denote abstract notions, such as states, activities, results or qualities, cf.: *teluŋu* 'story', *jexe* 'song, singing', *boko* 'color', and *zima* 'visit'. Normally words with abstract meanings correspond to adjectives or verbs in non-finite forms.

4.1. Nominal inflection

The order of inflectional morphemes in the nominal word is as follows:

(128) stem – (Plural) – (Alienable Possessive) – (Possessive Plural) – (case)
       (Possessive)

4.1.1. Nominal stems

Diachronically there were at least three different types of nominal stems, described in Schneider (1936) as vowel-final, *n*-final, and *l*-final stems. Vowel-final stems will be referred to as class I nouns and their declension will correspondingly be referred to as class I declension. The old *l*-final stems behave in the modern language like class I nouns, that is, they have become vowel-final (4.1.1.1). However, nouns whose stem ends in /n/ preserve some peculiarities, and these will be referred to as class II nouns, while their declension will be called the class II declension. Generally speaking, the old system with three types of noun stems is at present in a state of collapse, but a final reduction to one stem type has not yet occurred. Some traces of the old system are still preserved, especially in the speech of the older generation. The class I and class II declensions are still clearly opposed, although the number of class II words is gradually declining. Below we present the paradigms that illustrate the difference between the declension of the class I and class II nouns.

(129) Examples of the case paradigms (non-possessive forms)

	I class		II class	
NOM	*ugda*	'boat'	*namu*	'sea'
ACC	*ugda-wa*		*namu-me*	
DAT	*ugda-du*		*namun-du*	
LAT	*ugda-tigi*		*namun-tigi*	
LOC	*ugda-la*		*namun-dule*	
PROL	*ugda-li*		*namun-duli*	
ABL	*ugda-digi*		*namun-digi*	
INST	*ugda-zi*		*namun-zi*	

4.1.1.1. Class I nouns

In the absolute majority of cases, a Udihe nominal stem ends in a single vowel (for example, *anda* 'friend', *bä:* 'moon', *weige* 'floor', *gob'o* 'fly', *dili* 'head') or a vowel cluster (for example, *in'ei* 'dog', *bui* 'wild animal', *ku'ai* 'ear'). The class I nouns' vowel-final stem remains unchanged when inflected, cf.: *anda* 'friend' *anda-wa* (ACC), *anda-tigi* (LAT), *anda-zi* (INST), *anda-digi* (ABL), etc

4.1.1.2. Class II nouns

Class II nouns have *n*-final stems.

4.1.1.2.1. Particularity of declension

For the class II *n*-final nouns, the stem-final /n/ is not present in the Nominative, Partitive, and Accusative (both in the personal and impersonal forms); that is, in these cases the stem is vowel-final. In all other case forms, the stem ends in /n/, cf.: *xoto* 'town (NOM),' *xoto-mo* (ACC), *xoto-lo* (PART) but *xoton-tigi* (LAT), *xoton-zi* (INST), *xoton-digi* (ABL), etc. While quoting the II class words, *n* will be given in brackets.

The following are properties of the class II declension. Special case suffixes are used in the Locative and Prolative: *-dulA* *(-dilA)* and *-duli* *(-dili)* respectively (instead of the regular *-lA* and *-li* for the class I nouns). Class II nouns exhibit the Accusative suffix *-mA* instead of *-wA* as used by the class I nouns (e.g. *xu-me-ni* 'smell' <smell-ACC-3SG>). In addition, the difference between the class I and class II declensions becomes apparent in the possessive forms of the 1st person Singular and the 1st person Plural Exclusive in the Nominative (see 4.1.4.1.1).

4.1.1.2.2. Some historical considerations

At first sight, the reason for such a distribution seems to be purely historical-phonological. The oblique *n*-final stem is a common Tungus feature. It appears that in Udihe (and other Southern Tungus languages) the stem-final /n/ is preserved before the dentals, since all case inflections except the Accusative begin with a dental consonant (see 6.1.3). However, it is lost word-finally (in the Nominative) and before the labial /w/ (in the Accusative) in full accordance with the phonotactic rules of Udihe (Chapter 3). So if we take into account only case paradigms, the distribution n/∅ appears in the modern language to be based on phonological grounds.

However, several considerations arise at this point. *N*-final stems are typical not only of nouns, but also of other grammatical classes: verbs (7.1), some pronouns (9.1, 9.2), postpositions (10.2), numerals (11.1), and adjectives (6.1.1). For some of these categories the stem-final /n/ behaves in a slightly different way. Firstly, verbs show a distribution into two morphonological classes: vowel-final stems (class I) and *n*-final stems (class II). The class II verbs lose the stem-final /n/ only before the old Past and Perfect markers -*sV- and -*kV- respectively. However, in all other cases /n/ is preserved, including the occasions when it is followed by a non-dental consonant. The epenthetic vowel -*A*- is then inserted to prevent an impossible consonant cluster, for example: *dian-* + -*mi* → *dian-a-mi* 'I say' <say-0-1SG> (see 7.1 for details). Thus, in the same environment, in verbs epenthesis applies to prevent an illegitimate cluster and not the deletion of the stem-final consonant /n/, as in nouns. The same is true for personal pronouns (9.1.1), which exhibit an epenthetic vowel after the *n*-final stem and before the Accusative suffix -*wA*, for example, *min-e-we* 'me' <me-0-ACC>, although in this case an historical explanation may be possible (see 3.4.1.1.1).

For some groups of words /n/ is also preserved in the potential word-final position, and followed by an epenthetic vowel -*A*-, cf. the Nominative form of the Reflexive pronoun *men-e* (9.2), and the bare stems of the class II verbs that follow the negative auxiliary (7.1), such as *dian-a*. According to this, epenthesis is a more regular way to prevent consonant-final forms than the deletion of the consonant.

Finally, the stem-final /n/ is not present before the nominal Plural suffix -*zigA*, although it also begins with a dental, and the cluster *nz* is perfectly legitimate in Udihe (Chapter 3), cf.: *xoto-ziga* 'towns' instead of the expected **xoton-ziga*.

These pieces of evidence weaken the idea that the absence of the stem-final /n/ in the Nominative and the Accusative of nouns is conditioned simply by phonological considerations. Note also that the *n*-final stems are typical of certain morphological groups, for example, Past active participles that decline in the same way as class II nouns (7.5.1.1.2). These participles historically ended in **xan* (Benzing 1956). Most personal pronouns (9.1) and Cardinal

numerals (11.1.1) have *n*-final stems. This suggests that the distribution between class I and class II words may not have been entirely random.

4.1.1.2.3. Semantic groups

In Schneider's dictionary (Schneider 1936) about 20 nouns are in class II. All of them appear to belong to the native Udihe vocabulary, and they mostly denote very basic notions. In the modern language, they are even fewer. The reduction is likely to be motivated by the "analogy tendency", mentioned already in Schneider (1936: 93), which forces the generally non-numerous class II nouns to lose the stem-final /n/ completely and be reinterpreted as class I nouns. For some words parallel forms such as *ami-tigi* and *amin-tigi* 'to the father' (LAT), *xoton-du* and *xoto-du* 'in the town' (DAT), *belie-tigi* and *belien-tigi* 'to the fairy' (LAT) appear. The variations are found among idiolects and dialects. Other words have completely undergone the transition to class I, such as, for example, the common Tungus word **samān* 'shaman' (Cincius 1977: 59), which does not keep the historical stem-final /n/ and appears in the modern language as a class I noun *sama*.

Among the class II nouns a small semantic group of kinship terms is notable for having special suppletive Nominative and Vocative forms (see also 12.2.1.3), while their case and possessive forms derive from a different *n*-final stem:

(130)	Nominative	Vocative	declension stem	
	abuga, amita	*abuga-i*	*ami(n)-*	'father'
	eniŋe	*eniŋe-i*	*eni(n)-*	'mother'
	nexuse	*neŋu-i*	*neŋu(n)-*	'younger sibling'
	ag'a	*ag'a-i*	*'ai(n)-*	'elder brother, uncle; an address to a man by a child'
	exe	*exe-i*	*exi(n)-*	'elder sister, aunt; an address to a woman by a child'

However, these two types of stem are often mixed in speech, and the Nominative stem also sometimes takes the Plural, case, and Possessive suffixes. For example, the old possessive forms, derived from the class II declension stem, such as *ami-mi* 'my father' and *neŋu-mi* 'my younger sibling', can be replaced by the possessive forms, derived from the Nominative stem, such as *abuga-i* and *neŋu-i*, correspondingly.

The names of the local rivers *Xu:(n)* 'Khor', *Ima(n)* 'Iman', and *Biki(n)* 'Bikin' belong to class II as well, cf. for example, the Locative form *Xu:n-dile* 'on the Khor'. This fact is reflected in the Russian form of the two of these hydronyms ending in /n/ (*Bikin* and *Iman*). But the variants that follow the class

I noun declension pattern, such as *Biki-le* 'on Bikin' <Bikin-LOC>, are also often used.

The list of other nouns that generally preserve their class II peculiarities in the modern language is presented below.

(131) *xoto(n)*   'town, city'   *belie(n)*   'fairy girl'
      namu(n)   'sea'   *xu(n)*   'smell'
      kakt'a(n)   'half'   *koso(n)*   'angle'
      ñaŋna(n)   'sky'   *ogdo(n)*   'slope, side' (SK 370)
      eni(n)   'female (of hoofed animals)'

At the same time, grammatical classes other than nouns (numerals, Past Participles, certain quantifiers and postpositions), do not show such a strong analogy tendency if they belong morphonologically to class II. Basically they preserve the original class II declension rather well.

4.1.1.3. Traces of *l*-stems

One more consonant-final type of noun stem (historically ending in /ll/) was described in Schneider (1936: 93, 103) as disappearing and vague. According to Schneider, the paradigm of *l*-final nouns included an Accusative ending in -*bA*, instead of -*wA*- (for class I nouns) or -*mA* (for class II nouns) and the special Plural possessive forms with a final -*bi*. Such forms are no longer found and their existence is denied by speakers of the Bikin dialect. The only traces of an *l*-final noun declension type can be found in some isolated irregular cases: the irregular old Accusative form of the numeral 'two' *zu-be* (see Chapter 10) derived from the stem *zu*: (< *zu:l* < PTM **zūr*) and in the isolated obsolete form *xa-bi* 'my brothers and sisters' found in a folk-tale.

4.1.2. Number

The Singular of the noun is not morphologically marked. Plurality is not necessarily marked morphologically either (4.2.1.2), but can be encoded by special morphemes on the noun. Class I and class II nouns do not differ with respect to Plural formation.

4.1.2.1. Plural

Plurality is marked on the noun itself with the suffix -*ziga*. According to Schneider, this suffix follows vowel harmony and has the variants -*ziga/-zige/-zigo* (Schneider 1936: 97). However, in the modern Bikin dialect this suffix does not harmonize (3.5.2.2) and occurs mostly in the form -*ziga*.

The form -*zige* is in a free variant after the *e*-final stems, for example, both *exe-zige* and *exe-ziga* 'elder sisters' are possible. In *a*-final and *o*-final stems the last vowel of the suffix -*ziga* clearly sounds as -*a*, e.g. *tukca-ziga* 'hares', *ñaula-ziga* 'children', *pauza-ziga* 'roes', *soŋgo-ziga* 'bears', *ogbö-ziga* 'elks', and *oño-ziga* 'letters'.

Within the nominal word the Plural affix -*ziga* immediately follows the root and therefore precedes all other inflectional morphemes (the case and Possessive affixes), cf.: *giuse-ziga-ŋi-we-ni* 'his roes (ACC)' (Schneider 1936: 103) <roe-PL-AL-ACC-3SG>.

4.1.2.2. Collective Plural

Collective plurality is expressed by the classifying bound word *getu* (4.2.1.3). This word immediately follows the host target and cannot be separated from it under any conditions. It is compatible with the animate nouns that denote human beings, for example *ñ'aula getu* 'youth, young people', or *lusa getu* 'the Russians'. It also indicates plurality in the impersonal forms of the active participles, for example *zube ni: xudei getu* 'two merchants', *isene getu* 'audience' (literally: 'seeing ones') (see also 7.5.1.1); as well as in the nominalized modifiers (adjectives, pronouns or quantifiers) within the headless noun phrase (22.2.3). The bound word *getu* inflects for case and possession while the host word remains morphologically unchanged, for example *ñ'aula getu-we-i* 'your young people (ACC, 2 SG)'. However, we have one example in which the host word takes a possessive affix.

(132) *minti*   *sagda-nta-fi*   *getu*
　　　　we　　big-N-1PL.IN　　PL
　　　　'our old men'

The bound word *getu* does seems to go back to the separate word *getu* 'friend, comrade, companion, relative' illustrated in (133). Also, a derived verb *getu-le-ne-gi-* 'bring somebody' <relative-V-V-REP> behaves as other regular verbs and takes a cognate object, as shown in (133b).

(133) a. *Bi*　*getu-i*　　　　　*anči.*
　　　　　　me　friend-REF　　　no
　　　　　　'I have no relatives (friends).'
　　　b. *Si*　*getu-i*　　　　*getu-le-ne-gi-je.*
　　　　　　you　friend-REF　　friend-V-DIR-REP-IMP.2SG.
　　　　　　'Bring your relatives with you.'

4.1.2.3. Possessive Plural

Nouns denoting persons take the Possessive Plural affix *-nA-*. It follows the stem and is obligatorily followed by a Possessive inflection (134a). Class II nouns attach their special Accusative suffix *-mA-* after the Plural marker *-nA-* (134b). Inanimate nouns do not normally take the Possessive Plural suffix *-nA-*. When the Alienable Possessive affix *-ŋi-* is present the Possessive Plural affix *-nA-* follows it (134c).

(134) a. *bi getu-ne-tigi:* 'to my friends'
              <me friend-PL-LAT.1SG>
              sita-na-zi-ti 'with their children'
              <child-PL-INST-3PL>
       b. *exi-ne-me-ni* 'his sisters'
              <sister-PL-ACC-3SG>
              ami-ne-me-ni 'his ancestors'
              <father-PL-ACC-3SG>
       c. *aziga-ŋi-ne-we-ti* 'their daughters' (Schneider 1936: 103)
              <girl-AL-PL-ACC-3PL>

Schneider (1936: 103) hypothesizes that the Possessive Plural suffix *-nA-* used to end in a consonant, presumably /l/ (*-nA-* < *-nAl-*). The evidence he cites for this is that the 1st person Singular Possessive suffix used to appear in the form *-bi* after the Plural *-nA-*. As mentioned above (4.1.1.3), in Schneider's description this is a property of *l*-final stems. In the modern language the *l*-declension is lost, and the Possessive *-bi* does not occur. Instead the regular forms with the 1st person Singular Possessive affix *-i*, such as *bi sita-na-i* 'my children', are found. Occasionally, the affix *-mi* is used in this function as well, cf.: *bi 'ai-ne-mi* 'my brothers'. This may also indicate that *-nA-* goes back to *nan* (*nan* + *bi* > *na-mi*).

The suffix of the Possessive Plural *-nA-* is formally identical to the Destinative case marker (4.1.3) and shows a certain closeness of meaning (an expression of possession). It has been suggested (Igor' Kormušin, personal communication) that they may have a common origin (cf. the Russian construction *On mne brat* 'He is my brother' literally 'He is a brother to me', where the destinative Dative form *mne* 'to me' expresses possession). Whatever their origin may be, in modern Udihe the Destinative and the Possessive Plural are clearly different categories. Besides, they differ formally. The 1st person Singular and Singular Reflexive Destinative forms are *bi sita-na-mi* 'child for me' and *(men-e) sita-na-mi* 'child for oneself', respectively. The corresponding Possessive Plural (non-destinative) forms are *bi sita-na-i* 'my children' and *men-e sita-na-i* 'one's own children'.

4.1.3. Case

The Udihe case system includes ten cases. A case inflection follows the Plural suffix and precedes the Possessive. In non-possessive forms the case suffix is the rightmost morpheme within the word. Some morphophonemic peculiarities observed in the declension of possessive forms are addressed in 4.1.4.1.2. Case inflection is fairly regular for all nouns, the only differences existing are those between the class I and class II declensions (4.1.1). The Nominative is zero-marked morphologically and coincides with the bare stem for class I nouns. For class II nouns the Nominative form is vowel-final, that is, the stem-final /n/ does not appear. Likewise, in the Accusative and the Destinative class II nouns do not have the stem-final /n/, while in all other cases the class II stem appears in its full *n*-final form (see 4.1.1 for further discussion and examples). The case suffixes for the non-possessive forms are presented below:

(135)		I class	II class
	NOM	-	-
	ACC	-wA	-mA
	DAT	- du	-du
	LAT	-tigi	-tigi
	LOC	-lA	-dule (-dile)
	PROL	-li	-duli (-dili)
	ABL	-digi	-digi
	INST	-zi	-zi
	DEST	-nA-	-nA-

Under certain conditions, the Accusative case remains overtly unmarked and coincides with the Nominative (4.2.2.2.2–4.2.2.2.5). The Locative and Prolative affixes for the class II nouns have two variants each, one with the high round vowel /u/ and the other with the high vowel /i/. Their distribution is conditioned by the tendency to assimilate the vowel /i/ of the suffix to the /i/ vowel of the stem. Thus the variants -*dile* and -*dili* are normally used if the last vowel in the stem is /i/ (for example, *amin-dili* 'by the father' (LOC)), while the variants -*dule* and -*duli* are used in all other cases (for example, *xa-dule* 'by the brother' (LOC), *namun-dule* 'in the sea' (LOC), *xoton-dule* 'in the town' (LOC), etc.). This tendency, however, is not absolute in both directions. The Destinative case has a limited distribution: it must be followed by Possessive affixes and cannot co-occur with a Plural marker. For more on the form and the meaning of the individual cases, see 4.2.2.

4.1.4. Possessive

Possessive affixes attach to the head of the possessive noun phrase, the possessed noun (13.1). There are two types of Possessive suffixes: non-reflexive and reflexive. The Reflexive affixes mark the coreference of the possessor with the subject of the sentence (see 22.3 for details), while non-reflexive Possessive affixes indicate the lack of such coreference. The Possessive affixes are located at the right edge of the word, after all the other inflectional morphemes. Illustrative case paradigms for the possessive forms are presented below in 4.1.4.3.

4.1.4.1. Non-reflexive Possessives

The non-reflexive Possessive markers refer to the person and number of the possessor.

4.1.4.1.1. Possessive affixes

The case marker precedes the Possessive suffix, for example, *ŋala-wa-i* 'my hand (ACC)' <hand-ACC-1SG>. The non-reflexive Possessive affixes (for class I nouns) are as follows: *-i* 1SG, *-i* 2SG, *-ni* 3SG, *-u* 1PL EX, *-fi* 1PL IN (including the listener(s)), *-u* 2PL, *-ti* 3PL. Possessive forms of class II nouns are derived from the vowel-final stem, the stem-final /n/ is not present. The possessive forms of the class II nouns differ from those of class I nouns in the following two points:

(i) in the Nominative in the 1st person Singular the affix *-mi* is used instead of *-i*: *bi neŋu-mi* 'my brother', but *bi ugda-i* 'my boat';

(ii) in the Nominative in the 1st person Plural Exclusive the affix *-mu* is used instead of *-u*, for example: *bu neŋu-mu* 'our brother', but *bu zugdi-u* 'our house'.

Below we present examples of Nominative possessive forms for the class I noun *moxo* 'cup' and the class II noun *neŋu* 'younger sibling'.

(136)

1SG	*moxo-i*	*neŋu-mi*
2 SG	*moxo-i*	*neŋu-i*
3 SG	*moxo-ni*	*neŋu-ni*
1 PL EX	*moxo-u*	*neŋu-mu*
1 PL IN	*moxo-fi*	*neŋu-fi*
2 PL	*moxo-u*	*neŋu:*
3 PL	*moxo-ti*	*neŋu-ti*

These paradigms differ from those adduced for the Northern dialect (Schneider 1936; Sunik 1968; Girfanova 1988; Kormušin 1998) in their lack of the pharyngeal /h/ in the 2nd person Singular and 2nd person Plural markers. The authors mentioned above cite these affixes in the form -*hi* and -*hu*, respectively. Since in the Bikin dialect described here the laryngeal /h/ was lost (1.3.2.1), the affixes -*hi* and -*hu* do not occur. Thus, unlike in the Northern dialect described by these authors, in the Bikin dialect the forms of the 1st person Singular completely coincide with those of the 2nd person Singular, and the forms of the 1st person Plural Inclusive coincide with those of the 2nd person Plural.

The possessive affix -*ti* may express plurality either of the possessor or of the possessed noun (13.1.4). Further, there are some rare examples where -*ti* is used in the 1st person Plural Inclusive function, cf.: *bua-ŋi-ti* 'our God' (SKX 264), *minti neŋu-ti* 'our younger brother' (Schneider 1937: 74), and also *mi(n)ti b'a-ti* 'we have found' <we.IN find.PERF-3PL> (Schneider 1937: 46). The same affix is probably historically present within the 1st person Plural Inclusive personal pronoun *minti* 'we'.

4.1.4.1.2. Declension

In the oblique cases the class II nouns attach the same personal affixes as the class I nouns. However, the case affixes themselves differ. The possessive forms of both class I and class II nouns use the case markers appropriate for the corresponding declension (4.1.3). For example, in all persons class II nouns have the Accusative suffix -*mA*- instead of -*wA*- used in the possessive forms of class I nouns, cf.: *si neŋu-me-i* 'your brother (ACC)' <younger.sibling-ACC-2SG> and *si zugdi-we-i* 'your house (ACC)' <house-ACC-2SG>. In practice, however, analogous forms such as *si neŋu-we-i* 'your brother' (ACC) are also attested.

In the recent past, the markers of the Dative could have two variations, -*du*- and -*di*-. The variant -*di*- is normally a result of the assimilation of the original Dative suffix -*du*- to the following Possessive suffix if the latter contains the vowel /i/ (2.1.4.2), for example:

(137)   *eniŋe-di:* (< *eniŋe-di-i*)   'to my mother'
        <mother-DAT.1SG>
        in'ei-di: (< *in'ei-di-i*)   'to my dog'
        <dog-DAT.1SG>
        ti: aŋa-di-ni   'last year'
        <that year-DAT-3SG>

This fact is mentioned in Schneider (1936: 98). The assimilated forms were still in use in the 70s, at least in the Northern dialect recorded by Kormušin (for example, *pauza dili-di-ni* 'to the roe's head' <roe-DAT-3SG>). In the modern

Bikin dialect, analogy is leading to the gradual disappearance of the variant *-di* in favor of *-du*. Although the former can still be observed, forms such as *eniŋe-du-i* 'to my mother' and *in'ei-du-i* 'to my dog' have become more and more widespread. At the same time, the transitional variant of this marker *-dü-* (with the high front round vowel) is also heard before /i/ in the 1st and 2nd person Singular Possessive affix (*eniŋe-dü-i* 'to your/my mother' <mother-DAT-1SG>).

On other regular morphonological processes which occur in the declension of nouns see the section "Phonological alternations" (2.3).

4.1.4.2. Reflexive Possessives

Reflexive possessive forms are not opposed for different persons, but only for the Singular possessor and the Plural possessor.

4.1.4.2.1. Reflexive Possessive affixes

The marker of the Singular Reflexive is *-i* for class I nouns, and *-mi* for class II nouns. The marker of the Plural Reflexive is *-fi* for nouns of both classes (a reduced form of the earlier *-fai* attested by Schneider and in the modern Northern dialect). Examples of reflexive possessive forms for the class I noun *moxo* 'cup' and the class II noun *neŋu* 'younger sibling':

(138) SG *moxo-i* 　　　　*neŋu-mi*
　　　 PL *moxo-fi* 　　　　*neŋu-fi*

4.1.4.2.2. Declension

Reflexive possessive forms take the Plural suffix *-ziga*, indicating the plurality of the possessee, and are declined in the standard way.

(139) (*men-e*) *kusige-du-i*　　　　　　　　　'to one's own knife'
　　　 <REF-0 knife-DAT-REF>
　　　 kusige-tigi: (< *kusige-tigi-i*)　　　　'to one's own knife'
　　　 <knife-LAT.REF>
　　　 men-e in'ei-ziga-zi: (< *in'ei-ziga-zi-i*)　　'with one's own dogs'
　　　 <REF-0 dog-PL-INST.REF>

The case paradigms of the Singular reflexive forms and the Plural reflexive forms are basically similar to those of the non-reflexive forms, of the 1st or 2nd person Singular and the 1st person Plural Inclusive, respectively (see 4.1.4.3). However, the declension of reflexive possessive forms shows one important

peculiarity in comparison with the declension of the non-reflexive possessive forms. They do not take the Accusative suffix, thus the Accusative appears to be homonymous with the Nominative. More discussion of this matter can be found in 22.4.1.1.

4.1.4.3. Illustrative paradigms

Examples of case paradigms of the class I noun (*ugda* 'boat') and the class II noun (*neŋu* 'younger sibling') in the possessive forms are presented below. The difference in the Accusative between the Singular Reflexive and the 1st and 2nd person Singular non-reflexive, on the one hand, and between the Plural Reflexive and the 1st person Plural inclusive, on the other hand, is reflected in the paradigms. Reflexive forms are cited only if they differ from non-reflexive forms.

	'my boat' *bi ugda-i* 'one's boat' *men-e ugda-i*	'your boat' *si ugda-i*	'his/her boat' *nuani ugda-ni*
NOM	*egad-i*	*ugda-i*	*ugda-ni*
ACC	*ugda-wa-i* *egad-i* (REF)	*ugda-wa-i*	*ugda-wa-ni*
DAT	*ugda-du-i*	*ugda-du-i*	*ugda-du-ni*
LAT	*ugda-tigi:*	*ugda-tigi:*	*ugda-tigi-ni*
LOC	*ugda-la-i*	*ugda-la-i*	*ugda-la-ni*
PROL	*ugda-li:*	*ugda-li:*	*ugda-li-ni*
ABL	*ugda-digi:*	*ugda-digi:*	*ugda-digi-ni*
INST	*ugda-zi:*	*ugda-zi:*	*ugda-zi-ni*
DEST	*ugda-na-i* *ugda-na-mi* (REF)	*ugda-na-i*	*ugda-na-ni*

	'our boat' (EX) *bu ugda-u*	'our boat' (IN) *minti ugda-fi* 'one's boat (PL)' *men-e ugda-fi*	'your boat' *su ugda-u*	'their boat' *nuati ugda-ti*
NOM	*ugda-u*	*ugda-fi*	*ugda-u*	*ugda-ti*
ACC	*ugda-wa-u*	*ugda-wa-fi* *ugda-fi* (REF)	*ugda-wa-u*	*ugda-wa-ti*
DAT	*ugda-du:*	*ugda-du-fi*	*ugda-du:*	*ugda-du-ti*
LAT	*ugda-tigi-u*	*ugda-tigi-fi*	*ugda-tigi-u*	*ugda-tigi-ti*
LOC	*ugda-la-u*	*ugda-la-fi*	*ugda-la-u*	*ugda-la-ti*

PROL	*ugda-li-u*	*ugda-li-fi*	*ugda-li-u*	*ugda-li-ti*
ABL	*ugda-digi-u*	*ugda-digi-fi*	*ugda-digi-u*	*ugda-digi-ti*
INST	*ugda-zi-u*	*ugda-zi-fi*	*ugda-zi-u*	*ugda-zi-ti*
DEST	*ugda-na-u*	*ugda-na-fi*	*ugda-na-u*	*ugda-na-ti*

	'my younger sibling' *bi neŋu-mi* 'one's younger sibling' *men-e neŋu-mi*	'your younger sibling' *si neŋu-i*	'his/her younger sibling' *nuani neŋu-ni*
NOM	*neŋu-mi*	*neŋu-i*	*neŋu-ni*
ACC	*neŋu-me-i* *neŋu-mi* (REF)	*neŋu-me-i*	*neŋu-me-ni*
DAT	*neŋun-du-i*	*neŋun-du-i*	*neŋun-du-ni*
LAT	*neŋun-tigi:*	*neŋun-tigi:*	*neŋun-tigi-ni*
LOC	*neŋun-dule-i*	*neŋun-dule-i*	*neŋun-dule-ni*
PROL	*neŋun-duli:*	*neŋun-duli:*	*neŋun-duli-ni*
ABL	*neŋun-digi:*	*neŋun-digi:*	*neŋun-digi-ni*
INST	*neŋun-zi:*	*neŋun-zi:*	*neŋun-zi-ni*
DEST	*neŋu-ne-mi*	*neŋu-ne-i*	*neŋu-ne-ni*

	'our younger sibling' (EX) *bu neŋu-mu*	'our younger sibling' (IN) *minti neŋu-fi* 'one's younger sibling (PL)' *men-e neŋu-fi*	'your younger sibling' *su neŋu:*	'their younger sibling' *nuati neŋu-ti*
NOM	*neŋu-mu*	*neŋu-fi*	*neŋu:*	*neŋu-ti*
ACC	*neŋu-me-u*	*neŋu-me-fi* *neŋu-fi* (REF)	*neŋu-me-u*	*neŋu-ma-ti*
DAT	*neŋun-du:*	*neŋun-du-fi*	*neŋun-du:*	*neŋun-du-ti*
LAT	*neŋun-tigi-u*	*neŋun-tigi-fi*	*neŋun-tigi-u*	*neŋun-tigi-ti*
LOC	*neŋun-dule-u*	*neŋun-dule-fi*	*neŋun-dule-u*	*neŋun-dule-ti*
PROL	*neŋun-duli-u*	*neŋun-dule-fi*	*neŋun-duli-u*	*neŋun-duli-ti*
ABL	*neŋun-digi-u*	*neŋun-digi-fi*	*neŋun-digi-u*	*neŋun-digi-ti*
INST	*neŋun-zi-u*	*neŋun-zi-fi*	*neŋun-zi-u*	*neŋun-zi-ti*
DEST	*neŋu-ne-u*	*neŋu-ne-fi*	*neŋnu-ne-u*	*neŋu-ne-ti*

4.1.4.4. Alienable Possessive (the suffix *-ŋi-*)

We will here consider the suffix *-ŋi-* as encoding the category of Alienable Possessive. It is glossed as AL. The name of this category is arbitrary to a

considerable extent (on its function see 4.2.4). Sunik (1968) and Kormušin (1998) consider this suffix to express alienable possession, while Schneider (1936) does not use this term and simply describes the groups of nouns that demand *-ŋi-* in the possessive form.

The suffix *-ŋi-* is attached immediately after the noun stem. It does not refer to the person or the number of the possessor, but indicates a special type of possession relationship. Therefore it cannot substitute or eliminate the encoding of the possessor, and must obligatorily be followed by the regular Possessive affix referring to the possessor of the possessive noun phrase. The case affixes, if present, are located between *-ŋi-* and the Possessive suffix. The Possessive Plural affix (4.1.2.3) precedes the Possessive affix and follows the Alienable Possessive affix *-ŋi-*.

(140) *nua-ni   ja:-ŋi-ni*   'his/her cow'
       <he-3SG cow-AL-3SG>

       xatala-ŋi-we-u   'your (PL) girl (ACC)'
       <girl-AL-ACC-2PL>

       bi kuŋka mo:-ŋi-ne-i   'my cedar trees'
       <be cedar tree-AL-PL-1SG>

The only two cases where the suffix *-ŋi-* appears without being followed by the Possessive affix are: (i) in the Partitive and the Proprietive forms (see 4.3), and (ii) when the alienable possessive forms are used predicatively in the Nominative (see 17.2.2.3).

In Schneider (1936: 101) a variant *-ŋu-* is also mentioned. In our materials this did not occur in the Bikin dialect, but it is found in the Northern texts recorded by Kormušin.

(141) *Ulikte-ŋu-we-ni   zomo-si-e-ni.*
       lard-AL-ACC-3SG   steal-IM-PAST-3SG
       'Heᵢ has stolen hisⱼ lard'. (K 125)

4.2. Functions of nominal inflectional categories

This section deals with the function of the number (4.2.1), case (4.2.2), and possessive forms (4.2.3, 4.2.4). The corresponding categories of adjectives and participles are addressed in Chapter 6 and section 7.9, respectively.

4.2.1. Functions of the number forms

4.2.1.1. Singular

Apparently, all nouns have Singular forms.

4.2.1.1.1. Singular objects

Prototypically, nouns in the Singular are employed to refer to a single entity (in general or in circumstances in which entities can be counted), for example, *zugdi* 'house', *ñaŋña* 'sky'. They may also be uncountable mass nouns (such as *uli* 'water', *ñute* 'resin'). The nouns that function as non-possessive modifiers within a noun phrase are always in the Singular (13.7).

4.2.1.1.2. Generic and Plural notions

Singular forms may denote generic notions (*mo:* 'trees' in general) and Plural notions. In fact, the Udihe noun in the Singular form is neutral in respect to number. Its meaning can be both Singular and Plural and is greatly influenced by its co-occurrence with other elements indicating number. Thus, nouns in the Singular may also refer to many countable objects in an appropriate environment (see also 4.2.1.2).

4.2.1.1.3. Quantified noun phrase

All quantifiers normally require the head noun to be in the Singular, although the Plural is not entirely ungrammatical. See 13.3 for details.

4.2.1.1.4. Pair objects

The Singular may denote paired objects (*k'olo* 'mittens', *bugdi* 'legs', *ŋala* 'hands', *ku'ai* 'ears', *ja:* 'eyes', *weige* 'earrings', *uŋta* 'boots'). If they function as a subject, the predicate agrees with them in number, that is, it also takes the Singular form. In this case, the exact interpretation with respect to number can only be deduced from the context, cf. (142a) and (142b) where in both cases the subject has a morphologically Singular form.

(142) a. *Bugdi:*   *kägda:-ni.*
           leg.1SG   cold.PAST-3SG
           'My legs are cold.'

b.　*Bi　ugdi:*　　　*maŋga　uni:-ni.*
　　me　leg.1SG　　strong　ache-3SG
　　'My leg aches very much.'

4.2.1.1.5. Marked singularity

Singularity may be emphasized by the numeral *omo* 'one' when the corresponding unmarked nominal is inherently dual (143) or is a mass notion, cf. (144a) and (144b). In the former case the numeral *omo* 'one' may be combined with the pronominal adjective *gagda* 'other, another'.

(143)　a.　*Nuani　omo　gagda　bugdi.*
　　　　　he　　one　other　leg
　　　　　'He is one-legged.'
　　　b.　*omo　　gagda　ja:*
　　　　　one　　other　eye
　　　　　'one eye'

(144)　a.　*Seutigi　diga-na:-ni.　　　　　Bu-je*
　　　　　t　　　　eat-DIR.PAST-3SG　　give-IMP.2SG
　　　　　min-du　seutigi-we.　Keŋku　m'ei　seutigi.
　　　　　me-DAT　nut-ACC　　　empty　only　nut
　　　　　'They went to eat nuts. "Give me (some) nuts." – "All the nuts are empty."' (K 137)
　　　b.　*Tiŋmele:-n(i)　　　omo　seutigi.*
　　　　　fall.PAST-3SG　　one　nut
　　　　　'One nut fell.'(K 137)

Other examples of the stressed singularity of countable notions corresponding to uncountable mass nouns are *omo samikta* '(one) eye-lash' and *omo ñukte* '(one) hair' whose uncountable counterparts are *samikta* 'eye-lash', *ñukte* 'hair', respectively, cf.:

(145)　a.　*Ñukte-ni　c'a-ma　　　ede:-ni.*
　　　　　hair-3SG　white-ADJ　become.PAST-3SG
　　　　　'His hair became white.'
　　　b.　*Moxo-tigi　omo　ñukte　tiŋmele:-ni.*
　　　　　cup-LAT　　one　hair　fell.PAST-3SG
　　　　　'One hair fell into the cup.'

For some nouns denoting foods that consist of separate small pieces special counting words are used when a single part is referred to: *tuli* 'peas' and *omo*

tuli ikte-ni 'one pea' (literally: 'one pea seed'), *tuduze* 'potatoes' and *tuduze bombo-ni* '(one) potato' (literally: 'potato ball').

4.2.1.2. Plural

Plurality is not obligatorily marked morphologically on nouns. Apart from being encoded by the Plural suffixes, it may be expressed by other means such as a quantifier (13.3), or by semantic agreement with the adjectival modifier (13.2.2.) and/or with the predicate (15.1.1.2.2). The Plural of the object or the subject can be marked with the Distributive derivational suffixes on the verb (8.2.2.6). The mass and uncountable nouns including nouns co-occuring with the collective word *getu* (4.1.2.2) are *singularia tantum*.

4.2.1.2.1. Plural and associative meanings

Although this is not obligatory, the Plural can be morphologically marked by the suffix *-ziga* (4.1.2.1), cf.: *tege* 'gown' and *tege-ziga* 'gowns'. The Plural when applied to inherently dual objects signifies reference to multiple pairs: *k'olo-ziga* 'several pairs of mittens'. The Plural suffix *-ziga-* is regularly used with proper (kin) names and then it means the members of one family (kin), see example (146). The traditional names of the Udihe kin groups in the Plural (e.g. *Sulän-ziga, Pioŋka-ziga, Kälun-ziga*) are now used as surnames (1.2.5).

(146)   *Uti   Pioŋka-ziga   zugdi-ti.*
       that   Pionka-PL   house-3PL
       'This is the house of the Pionka (a family).'

The Plural may sometimes have an associative meaning. Thus, *Kanda mafa-ziga* means something like 'the house people of the old man Kanda; the old man Kanda and people associated with him' (*Kanda* refers to a class of folklore characters, *mafa* 'old man'), but not 'several old men Kanda', as could be expected; and *g'ai-ziga* is 'crow and its friends' (Schneider 1937: 64).

(147)   a.   *Mamaka-ziga-la*   *digeŋ-ki-ni.*
            old.woman-PL-FOC   hide-PAST-3SG
            'The old woman and those who were with her have hidden.'
            (K 107)

      b.   *Ele*   *bude-mi,*   *ama-ziga*   *enie-ziga*
          soon   die-1SG   father-PL   mother-PL
          xokto-li-ti   *ŋene-mi.*
          road-PROL-3PL   go-1SG
          'I will die soon, I will take the road of my ancestors.' (SK 1139)

c. *Guatu-ziga*
    Guatu-PL
    'Guatu and his family' (SKX 318)

4.2.1.2.2. Conditions on Plural marking

The Plural is usually morphologically marked on nouns denoting persons or animals (when they act like people in tales). The corresponding noun phrase serves as the subject and there is no other indication of plurality. Generally speaking, the Plural of a subject, especially when denoting a person, is more or less regularly marked, whereas the Plural suffix of a direct object appears less frequently. The Plural forms with the suffix *-ziga-* are regularly used in addresses.

(148) *Exe-ziga*   *exe-ziga*   *su*   *j'e-uxi*   *ŋene-u?*
       elder.sister-PL elder.sister-PL you   what-LAT   go-2PL
       'Sisters, sisters, where are you going?'

The morphological Plural of the other case forms and of inanimate nouns is rare in spontaneously generated texts, although speakers recognize such forms as the correct ones. Inanimate nouns and nouns in the oblique cases may take the Plural marker when plurality is stressed, for example:

(149) *Jegdige*   *i:ŋ-ki-ni*   *tukca-ziga-la.*
       hero   enter-PAST-3SG   hare-PL-LOC
       'The hero entered the hares' (place).'

Thus, the occurrence of the Plural suffix *-ziga-* seems to correlate with two ultimately interrelated factors: the animacy of the referred entity and the syntactic role of the corresponding noun phrase in the sentence. For animate nouns and for syntactically more active elements (which are normally topical as well) the plurality is more likely to be morphologically marked. On the other hand, inanimate nouns and those that correspond to 'lower' grammatical relations (indirect and oblique objects, and adjuncts) are more likely to remain morphologically unmarked with respect to number, even when they denote several countable entities. The rationale behind this observation is perhaps that the Plural tends not to be overtly marked if the corresponding element has already been mentioned in the text in the Plural. See examples (150a) and (150b), which are taken from the same text.

(150) a. *Tuge-zi*   *tukä:-iti*   *in'ei-ziga.*
           quick-INST   run-3PL   dog-PL
           'The dogs are running quickly.'

b. *In'ei-we* *tindaŋi:-si* *ŋene:-ti* *caixi.*
 dog-ACC let-PC.SS go.PAST-3PL further
 'Having loosed the dogs they went further.'

In (150a) the dogs are introduced into the text for the first time, and the corresponding (subject) noun phrase is in the plural. In (150b), which occurs later in the texts, the same dogs are mentioned in the Singular. Their number has already been established in the previous piece of discourse, and therefore the Plural marker would here be redundant. If we accept that new elements are normally introduced in the text as subjects, in particular, of presentational constructions as in (150a); this explains why the Plural marker mostly appears in subject noun phrases.

4.2.1.3. Collective plural

The collective Plural word *getu* forms collective nouns only from nouns denoting persons. Collective nouns with the word *getu* refer to a group of individuals: *ñaula getu* 'youth', *baja getu* 'rich people' (as a class), *ibene getu* 'Japanese people' (as a nation), *zima getu* 'guests'. The resulting compound expressions denote a mass notion; that is why they cannot be used in contexts which require an individualization of each entity, for example, they cannot be arguments of the postposition *agda-la-ni* 'between': **ñ'aula getu agda-la-ni* is ruled out, while *ñ'aula-ziga agda-la-ni* 'between the boys', where the noun takes the non-collective Plural affix *-ziga*, is allowed. Typically, collective nouns with the word *getu* do not co-occur with other markers of plurality (*-ziga* or *-nA-*) and cannot be quantified, however cf. the Northern *sita getu-zige* 'children' (SKX 326), *wakča-i getu-ziga* 'hunters' (SKX 286), and other similar examples.

Collective compound expressions trigger Singular verb agreement (151a), but for the adjective in a predicative position the semantically motivated Plural form in *-ŋku* (6.1.2.1.1) is required (151b).

(151) a. *Ñ'aula* *getu* *etete-zeŋe-ni.*
    youth PL work-FUT-3PL
    'The young people will work.'
  b. *Ei* *ni:* *getu* *maŋga-ŋku.*
    his person PL strong-PL
    'These people are strong.'

4.2.1.4. Possessive plural

The Possessive Plural suffix -*nA*- is mostly compatible with a restricted class of words, mainly kinship terms (*omölo* 'grandchild', *neŋu* 'younger sibling', *a'i* 'older brother', *exi* 'older sister', *xanta* 'relation', *ami* 'father' (the Plural form means 'ancestors')) and certain other nouns denoting persons. It is fairly regular with the following nouns: *sagdinta* 'old people' (often shortened to *saŋta*), *anda* 'friend', *getu* 'comrade', and *sita* 'child, cub', cf.: *keige sita-na-ni* 'kittens' (literally: 'cat's children'). The Plural possessive nouns with -*nA*- function as heads of a possessive noun phrase (13.1), that is, the Plural marker -*nA*- always co-occurs with a Possessive suffix within a word, cf.:

(152) a. *Udie*   *tue-ze-zi*   *sita-na-zi-fi*
Udihe   winter-N-INST   child-PL-INST-REF.PL
bagdi-e-ti.
live-PAST-3PL
'The Udihe lived in winter huts with their children.'
b. *Bi* *Ñ'ädiga*   *xanta-na-wa-ni*   *sa:-mi.*
me Nadiga   relative-PL-ACC-3SG   know-1SG
'I know Nadiga's relatives.'
c. *Udie*   *ni:-ne-we-ni*   *saŋta-na-wa-ni*
Udihe   man-PL-ACC-3SG   old.man-PL-ACC-3SG
a:nta-na-wa-ni   *ñ'aula-na-wa-ni*
woman-PL-ACC-3SG   child-PL-ACC-3SG
teluŋu-si-du-ze.
story-V-PL-SUBJ.3SG
'Let them tell about the Udihe old people, men, women, and children.'

Within the quantified noun phrases the Possessive Plural affix generally follows the same rules as the non-possessive Plural marker -*ziga* (4.2.1.2). An example of the quantified Possessive Plural noun phrase is: *zube exi-ne-ni* 'her two sisters' <two sister-PL-3SG>.

In the fixed expression *ama-na(-ti) enie-ne(-ti)* 'the father and the mother' (SK 1139) the possessive Plural indicates duality. Here possessive markers are optional.

4.2.2. Functions of the cases

4.2.2.1. The Nominative

The Nominative forms coincide with the bare noun stem, therefore the Nominative is not indicated in the glosses. The Nominative noun phrase

typically corresponds to the subject argument of transitive and intransitive verbs (Chapter 14) including (the pronominal) subject of the Personal Passive, which encodes the patient/theme argument (15.1.1.2). On the syntactic properties of the subject see 15.1.1. The Nominative is also the case of the subject in most (though not all) copular constructions (17.2.2) and the only argument of the subjective and sometimes objective Resultative (17.2.2.5). Beside this, Nominative nouns have the predicative function (17.2.2.1.3) and may serve as the (new or non-specific) direct object (4.2.2.2).

The Nominative noun phrase functions as a modifier within a larger possessive noun phrase (13.1); it is also used in appositions (13.8), in addresses (12.2.1.1), and as a quotation and label form of a noun. A second or third (essive) argument of a small number of verbs corresponds to the Nominative noun phrase (see 14.3.9 and 14.4.8).

Most postpositions govern the Nominative case, for example: *teŋku wei-le-ni* 'on the stool' (see more in 10.2.3). Nominative forms are used in some "frozen" adverbial expressions meaning duration of time or location in time: *gä:ŋa ineŋi-ni* 'all day long', *dogbo ineŋi* 'through night and day', and other analogous expressions of time (15.4.2.8).

4.2.2.2. The Accusative

In a non-reflexive noun phrase the Accusative is usually marked with the suffix *-wA-* or *-mA-*. For the reflexive noun phrases the Accusative is homonymous with the Nominative (4.1.4.2). The prototypical function of the Accusative is to denote a direct object. On the definition of the direct object see 15.2. In the direct object function the Accusative case is not always morphologically marked, and even for non-reflexive noun phrases can sometimes coincide with the Nominative. The issue is not entirely clear because the two likely causes of this behavior, the phonetic and the semantic, sometimes work in combination. In functions other than the direct object the non-reflexive Accusative is always morphologically marked, but there is also a tendency to omit the Accusative marker on the noun phrase that corresponds to the patient/theme argument in Passive and Agentless Passive constructions (16.1.1, 16.1.2).

4.2.2.2.1. Functions of the Accusative

The Accusative noun phrase corresponds to the object argument of the transitive verbs with different semantic roles: patient, theme, content, goal, stimulus, etc. (14.3, 14.4). The case is inherited by the corresponding (non-pronominal) argument in passive constructions, as distinct from English and many European languages, both in the Passive (16.1.1) and Agentless Passive (16.1.2). The Accusative (or the Dative) marks the causee in the

Causative constructions (16.1.4) and the only argument of the objective Resultative (17.2.2.5.2). It is also used to indicate the addressee of the imperative in indirect speech constructions (18.4.4). The double object construction is addressed in 16.2.1.

A few nouns (13.6.2) and postpositions (10.2.3) take an Accusative argument. Adverbial elements are marked by the Accusative if they denote a span of time (15.4.2.6).

4.2.2.2.2. Phonetically-driven absence of the Accusative

The Accusative marker -*wA*- can be dropped when speaking quickly, especially after the round vowels /o/ and /u/. For example, the Accusative form *au-wa* 'cap' is often replaced by the Nominative *au* 'cap'. The same occurs if the word ends in -*wA* and -*fA*, for example *mäwa* 'heart', *iŋofo* 'bird cherry tree', *mafa* 'old man, bear' (which is rarely found in texts with the Accusative marker), or if the following word begins with *wa*-, such as the verb *wa*- 'kill'. Note, however, that the topicalized object that undergoes left- or right-dislocation is always marked by the Accusative, even if its non-topicalized counterpart is not.

(153) *Nada au*   *teti-gi-e-nie*   *joxoso-mo*
       seven cap   dress-REP-PAST-3SG   kettle-ADJ
       au-wa.
       cap-ACC
       'He put on seven caps, caps made of kettles.' (K 181)

4.2.2.2.3. Semantically-driven absence of the Accusative: non-specific objects

There is a tendency to avoid the overt Accusative when the object has a non-specific reading. This tendency seems to be stronger in the Northern dialect than in the Southern dialect, though in neither does it approach a strict rule. The examples below are mostly from the Northern texts. They illustrate either the non-specific (in the sense of not necessarily existing) reading of the direct object (145), or its generic reading (146), or mass objects (147).

(154) a. *Sugzä:-da*   *e-mu*   *diga* *ule:-de*
         fish-FOC   NEG-1PL.EX eat   meat-FOC
         e-mu   *diga.*
         NEG-1PL.EX eat
         'We eat neither fish nor meat.' (K 174)

b. *Bi   sun-du   gida   bu-zeŋe-i.*
me   you-DAT   spear   give-FUT-1SG
'I will give you a spear.' (K 176)

c. *We:-tigi   ŋene-ze-fi   seutigi*
forest-LAT go-SUBJ-1PL.IN   nut
diga-na-za-fi.
eat-DEST-SUBJ-1PL.IN
'Let us go to the forest and eat some nuts.' (K 137)

(155) a. *I:mi   dai-wa-si-ze-i   ni:-le.*
why   drop.in-CAUS-MUL-SUBJ-2SG
man-CONT
'Why do you make people drop in?' (K198)

b. *Uti   sita-ni   bui   magi-e-ni.*
that son-3SG   animal kill-PAST-3SG
'Her son was killing animals.' (K 179)

(156) a. *Belie   sutu   akpu-nda:-ni.*
girl   rubbish   sweep-SEM.PAST-3SG
'The girl swept out the rubbish.' (K 128)

b. *Ba:-la   to: ilaŋi-e-ni.*
nature-LOC   fire   light.PAST-3SG
'She made a fire outside.' (K 193)

c. *Xunepte   läsi   s'olo:-ni.*
ash   very   scoop.PAST-3SG
'He scooped up very much ash.' (K 105)

4.2.2.2.4. Semantically-driven absence of the Accusative: specific new objects

In the Northern dialect specific nouns can also lack a morphologically marked Accusative. They are likely to be zero-marked in the object position if the corresponding participant is being introduced in the text for the first time, cf.:

(157) a. *Talu-ma   emuge wo:-ni,   ic'a   emuge*
birch.bark-ADJ   cradle make.PAST-3SG   small   cradle
wo:-ni,   talu-ma   emuge   uta-du
make.PAST-3SG   birch.bark-ADJ   cradle   that-DAT
'She made a birch bark cradle, a small birch bark cradle for him.'
(K 181)

b. *Uniŋa   zawa-mi-de   uniŋa-la:-ni.*
spoon   take-INF-FOC   spoon-V.PAST-3SG
'Having taken a spoon she used it to scoop up.' (K 199)

c.   *Senmi   gakpa:-ni   uta-wa   agaŋ-ki-ni.*
     arrow   shoot.PAST-3SG   that-ACC step-PAST-3SG
     'He shot an arrow and she stepped over it.' (K 173)

d.   *Jegdige   ba: xo:n-dule-ni   ule:-ni   agdu.*
     hero   place   top-LOC-3SG   dig.PAST-3SG hole
     'The hero dug a hole in the forest.' (K 132)

e.   *Xogdo   xebu-si-e-ni   we:*
     spear   take-MUL-PAST-3SG   hill

     dulaŋki-le-ni   asamu-o:-ni   xogdo-wo.
     middle-LOC-3SG   aim-PAST-3SG   spear-ACC
     'He took a spear and aimed it at the middle of the hill.' (K 169)

Note also that the object is likely not to have the Accusative marker if the verb is in the Imperative. In fact, in this case the object is often appearing in the text for the first time.

(158) a.   *Zekpu-ne-i   zeu.*
           eat-DEST-IMP.2SG   food
           'Come to eat some food.' (K 117).

      b.   *Ćuige   bu-je.*
           fire.stone give-IMP.2SG
           'Give me a fire stone.' (K 120)

Finally, Accusative marking is more likely to be absent in a non-finite embedded clause than in an independent clause. In a non-finite embedded clause it may occur even if the object is formally definite.

(159) *Mafa imo:-ni bua   tue-ni   diga-mi   ina-ini.*
       bear fat-3SG place winter-3SG   eat-INF   enough-3SG
       'Bear fat is enough to eat in the winter time.' (SK 550)

4.2.2.2.5. Interaction of several factors

Thus, the Accusative marker can be absent for semantic and phonetic reasons. According to the semantic tendency, more fully manifested in the Northern dialect, the Accusative case marking is likely to be absent in the direct object noun phrase if it is: (i) non-specific (including generic and mass nouns); (ii) a specific count noun not mentioned previously in the text, and therefore indefinite. In all these cases, however, the morphologically marked Accusative is not ruled out either, for example (160a) shows a non-specific noun phrase in an object role which is inflected for the Accusative suffix *-wA*. Alternatively, specific and previously mentioned (definite) noun phrases may sometimes have

a bare form in the direct object role, which can hardly be explained phonologically, as in (160b).

(160) a. *Ono bie*   *mamasa-wa*   *gele-i?*
      how be.PRES.HAB   wife-ACC   look.for.-2SG
      'What sort of wife do you want?' (K 173)

    b. *In'ei ikteme-ne:-ni*   *pauza.*
      dog bite-DIS-PAST-3SG   roe
      'The dogs bit the roe.' (K 138)

Of course, several of the factors mentioned can work in parallel. In (161) the absence of the Accusative marker can be explained either by phonological considerations (the potentially adjacent syllable beginning with /f/ or /w/) or by the non-specific/indefinite character of the object, or by its co-occurrence with the Imperative verb.

(161) a. *Omo*   *gagda*   *ŋala-zi*   *oño*   *wo:-i.*
      one   another hand-INST   ornament   make-PRR
      'She is making ornaments with one hand.'

    b. *Iŋofo*   *xoa-ja.*
      bird.cherry   cut-IMP.2SG
      'Cut a bird cherry tree.' (K 113)

    c. *ŋene-mi*   *ogbö*   *wa:-ni.*
      go-INF   elk   kill.PAST-3SG
      'On the way, he killed an elk.' (K 144)

4.2.2.3. The Dative

The Dative case marker is *-du*. The Dative expresses the semantic roles of benefactive/malefactive, recipient, goal, direction, and the like. It marks the recipient/benefactive/goal argument of two-place (14.3.7) and three-place (14.4.1) verbs. In some copular constructions (17.2.3) the Dative corresponds to the single experiencer animate argument of the experiential predicates (the desiderative state, physical or mental state). A specific function of the Dative is to encode the agent in Passive sentences (see 16.1.1) and the causee of causative verbs derived from transitives (16.1.4.3.2).

Furthermore, in spite of its conventional name, the Dative commonly expresses a local meaning. In this function it may be interchangeable with the Locative (see 4.2.2.5). Thus, in the valence patterns that require a Locative argument (14.3.6 and 14.4.7) the Dative is also possible for a certain group of verbs. As an adjunct, the Dative noun phrase can express the local relationship (15.4.1.5) including those adjuncts that are very commonly found in existential

sentences (17.2.1.3), as well as the temporal relationship (15.4.2.1), and goal/benefactive-type (15.4.4.2) adjuncts.

4.2.2.4. The Lative

The suffix of the Lative is *-tigi*. This suffix is frequently phonetically reduced to *-ti:* because /g/ may be pronounced as a non-occlusive γ, and further reduction leads to the contraction of γ with the following vowel (*tigi* > *tiɣi* > *tii:* > *ti:*).

The prototypical function of the Lative case is to express direction ('toward, to'). The Lative noun phrase functions as an argument with this meaning in the valence patterns described under 14.3.3 and 14.4.4. Obviously, it also functions as a spatial adjunct (15.4.1.2). Its extended function as an adjunct is to express the final point of time (15.4.2.5) and, on an even more abstract level, purpose (15.4.4.1). The Lative also denotes the recipient argument (addressee) of some verbs of transfer of information, see 14.3.2 and 14.4.3. Such an argument corresponds to the grammatical relation of the indirect object (15.3).

4.2.2.5. The Locative

4.2.2.5.1. Functions of the Locative

The Locative suffix is *-lA* for the class I nouns and *-dulA/-dilA* for the class II nouns. The most common function of this case is to express spatial location (location in/on/at/by something and movement into something, as opposed to the Lative case which expresses rather the direction towards/to the object). The Locative noun phrase functions as an argument in the clauses where the predicate follows the valence patterns 14.3.6 and 14.4.7 and may correspond to the patient/theme argument in the so-called Locative object construction (16.2.4).

As an adjunct it can express location (15.4.1.1), a point in time (15.4.2.2) and, in its metaphorical function, the source of information (15.4.3.2), a cause (15.4.3.3), and a group of which some member is involved in the situation under discussion (15.4.3.2.1). Occasionally, the Locative expresses a possessor in copular constructions, such as 17.2.1.3, although in the majority of cases such constructions have an existential meaning and the Locative noun phrase in them functions as a place adjunct.

4.2.2.5.2. The Locative vs. the Dative

In the local meaning (both as an argument and adjunct) the Locative noun phrase is often interchangeable with the Dative noun phrase. The Dative vs. Locative marking depends on the character of the noun phrase itself. For example, some verbs co-occur with the following Dative noun phrases: *zugdi-du* 'in the house', *Bali-du* 'in (the city of) Khabarovsk', *kniga-du* 'in the book', *kluba-du* 'in the club'. At the same time, they co-occur with the following Locative noun phrases: *mo:-lo* 'on the tree', *namu-le* 'at the sea'. The word *zugdi* 'house' in combination with the verb *bagdi-* 'live' takes the Locative if the house does not belong to the subject participant, cf. (162a) and (162b):

(162) a. *Bi xoŋto zugdi-le-ni*   *bagdi-mi.*
          me other house-LOC-3SG   live-1SG
          'I live in somebody else's house.'

     b. *Bi ei zugdi-du ei-mi*   *bagdi.*
          Me this house-DAT NEG-1SG   live
          'I don't live in this house.'

The nouns that denote living people (and the personal pronouns) are normally in the Locative when they have the locational meaning, for example: *Pakula-la* 'at Pakula's', *ni:-le* 'at the man's', *Koko-lo* 'at Koko's'. In general, the Dative seems to be preferred in the meaning 'in' and the Locative corresponds more to the English prepositions 'on' or 'at'; compare: *uli-du* 'in the river (DAT)' and *uli-le* 'at the river (LOC)'. However, the distribution of the Locative and the Dative in the local sense does not follow any strict semantic or phonological criteria and has to be learned for each individual instance.

For certain verbs and constructions the Dative/Locative interchange is not possible, see 14.3.6.2. For example, the copular construction 'be married to someone' (of a woman) always requires a Dative argument (17.2.2.2.2).

4.2.2.6. The Prolative

The Prolative is encoded by the suffix *-li* for class I nouns and *-duli/-dili* for class II nouns. It functions as an argument for a few verbs (14.3.8) or as a spatial adjunct (15.4.1.4) and generally denotes movement along or through something. In the temporal use its meaning is something like 'day by day', 'week after week', etc. (15.4.2.7).

4.2.2.7. The Ablative

The marker of the Ablative is *-digi* for both class I and class II nouns. Its prototypical meaning is to express movement away from or out of a location. As an argument of movement verbs it is found in the valence patterns 14.3.5 and 14.4.6. As an adjunct, the Ablative noun phrase can have spatial (15.4.1.3), temporal (15.4.2.3), or a metaphorical causal (15.4.3.3) meaning. A special use of the Ablative is within the comparative construction (6.3.4 and 10.1.7.3) where it denotes the standard of comparison.

4.2.2.8. The Instrumental

The Instrumental case is marked by the suffix *-zi*. As an argument and an adjunct, the Instrumental noun phrase can have a large range of meanings that can be covered by the general label 'circumstance' or 'means' (the means employed for the action). On valence patterns with the Instrumental case see 14.3.4 and 14.4.5. The Instrumental noun phrase can express the period of time (15.4.2.4). As a manner adjunct it denotes means of conveyance, price, instrument, circumstance, sometimes the cause, the way of transmission of information, the source of information, or the material used (15.4.3). The comitative meaning of the Instrumental noun phrase ('with somebody') is common. The Instrumental comitative noun phrase functions as a determiner within a larger noun phrase (13.6.1) or as a kind of a comitative adjunct (15.4.6). Besides, it can mark the counter-agent participant of a reciprocal situation (16.1.6.2.1, 14.3.4.2).

4.2.2.9. The Destinative

The Destinative case marked with the suffix *-nA-* has a rather limited use. Generally speaking, it denotes either an object meant, designed, or destined for a particular person or another object, or a destination itself. In the first meaning, the destinative object noun phrase functions as a verbal argument (16.2.2). This has the following two consequences: first, the destinative object co-occurs only with a special class of verbs, namely, verbs of appearance and creation (see 14.2.1.3); second, its form should contain a reference to its potential 'recipient' (benefactive or goal). Indeed, as mentioned in 4.1.3, only possessive nouns take the Destinative case; so the Destinative form must necessarily contain a Possessive affix that agrees in person and number with the potential possessor (benefactive) of the destinative object.

In its second meaning, the destinative noun phrase functions as a clausal adjunct (15.4.4.3). In this case it expresses the destination of the object independently present in the clause and can be translated into English with 'as':

mamasa-na-ni 'as a wife for him'. Similarly, when used predicatively in certain copular constructions (17.2.2.2.1) the destinative noun phrase denotes not the object designated for a particular purpose, but the destination ('as something for somebody'). The benefactive participant is cross-referenced by the possessive affix on the destinative noun. Note that the Singular Reflexive Possessive affixes on the destinative noun do not in this case have a reflexive meaning, but are used to express general destination: *kusige-ne-mi* 'as a knife, for the knife' <knife-DEST-REF>.

4.2.3. Functions of the possessive forms

The possessive forms head the possessive noun phrase (on its syntax see 13.1). The modifier of the possessed noun in such a construction is either a noun or a personal pronoun (which can be anaphorically dropped). Both non-reflexive (163a) and Reflexive (163b) Possessives are used in this case.

(163) a. *(bu) zugdi-u*   'our (EX) house'
           giuse ule:-ni   'roe's flesh'
           (bu) zugdi-u   'our (EX) house'
       b. *(men-e) zugdi:* (< *zugdi-i*)   'one's house (SG)'
           (men-e) zugdi-fi   'one's house (PL)'

The possessive forms within a possessive noun phrase cover an array of functions.

4.2.3.1. Possessive function

The prototypical function of the possessive construction is to express possession, both inalienable possession (body parts like *bi ŋala-i* 'my hand', *in'ei igi-ni* 'dog's tail' and kinship relations such as *si sita-i* 'your child', *bi neŋu-mi* 'my brother') and ownership/belonging (*mama tege-ni* 'grandmother's gown'). Kinship terms mostly have possessive forms unless used in generic contexts. The presence of the possessive affix may affect the meaning of the word, cf. *mafa* 'old man' and *mafa-i* 'my husband, your husband', *mafa-ni* 'her husband', etc.

In this function the possessive affixes are used both for anaphoric and cataphoric relations. An example of backwards anaphora is as follows.

(164) *Sumuxi* *ag'a-wa-ni*   *wentile-gi-e-ni*
   hazel.hen elder.brother-ACC-3SG throw-REP-PAST-3SG
   emende-du.
   witch-DAT
   'He threw the witch her elder brother hazel-hen.' (SKX 114)

4.2.3.2. Non-possessive function

Besides the prototypical possessive function, the grammatical possessive relation is extended to express other semantic relations. Some of those meanings are marked in certain languages by the Genitive construction, which Udihe lacks. In Udihe the 3rd person Singular non-reflexive Possessive affix is employed here, while other Possessive affixes are not normally possible.

4.2.3.2.1. The part/whole relationship

The part/whole relationship is expressed by a possessive construction. The part/whole relationship underlies the use of the 'spatial' words that are semantically dependent on another noun because they denote a certain part of it. Hence they cannot be used without a Possessive suffix, which indicates that relationship. Used with different local cases, they function as spatial postpositions (10.2.1).

(165) | | | | |
|---|---|---|---|
| *tege ukie-ni* | 'sleeve of a gown' | *taŋki-ni* | 'its center' |
| *olondo texe-ni* | 'ginseng root' | *kä:-ni* | 'its edge' |
| *pauza ule:-ni* | 'roe's meat' | *moxo kä:-ni* | 'the edge of a bowl' |
| *dulaŋki-ni* | 'its middle' | *uli kä:-ni* | 'the bank of a river' |

A kind of part/whole relationship holds between the object denoted by an uncountable mass noun and a countable entity which denotes a piece of it, for example: *xauje pei-ni* 'a sheet of paper'. Cf. also: *buniga xokto-lo-ni* 'on the road to the realm of death'<realm.of.death raod-LOC-3SG> (Schneider 1947: 42)

A subtype of the part/whole relationship is the relationship between a substance and its container, for example: *'ai baŋka-ni* 'a bottle of vodka', *imo: namaŋki-ni* 'a saucer of fat'. Such constructions denote the specific and definite substance that 'belongs' to the specific container. Therefore they cannot be used to express an abstract measure of substance, in which case the non-possessive quantified noun phrase is used (13.3). Compare (166a) where a

concrete bucket of water is meant and (166b) where the corresponding noun phrase is non-specific and therefore the Possessive affix is missing.

(166) a.   *Mulexi*   *uli-we-ni*   *ni-ke*
        bucket   water-ACC-3SG   who-IND
        mantila:-ti.
        empty.PAST-3PL
        'Somebody emptied the bucket of water.'

     b.   *Gazi-je*   *omo*   *mulexi* *uli-we.*
        bring-IMP.2SG   one   bucket   water-ACC
        'Bring a bucket of water.'

4.2.3.2.2. Species relationship

When a proper noun qualifies another noun, the latter takes the Possessive 3rd person Singular suffix, for example:

(167)   *Kančuga se:-ni*   'kin (of) Kanchuga'
      udie a:nta-ni   'Udihe woman'
      Biki uli-ni   'the river Bikin'
      lusa ñ'aula-ni   'Russian boy'
      niŋka sexi-ni   'Chinese cloth'
      Laubelaza we:-ni   'the hill Laubelaza'
      ibene golo-ni   'Japan (Japanese country)'
      lusa keje-ni   'the Russian language'
      niŋka golo-ni   'China (Chinese country)'
      Kuŋgede bä:sa-ni   'the river Kungede'(K 154)

In the latter case the proper noun *Kuŋgede* actually means 'empty': compare the corresponding adjectival construction without the Possessive marker *kuŋgede bä:sa* 'empty river'. The possessive form *Biki-ni* '(the river) Bikin' (with the 3rd person Singular Possessive suffix) occurs as well and may be a reduced variant of the full construction *Biki uli-ni* 'the river Bikin'. A similar relationship holds between the names of the trees and the word *mo:*, for example: *kuŋka mo:-ni* 'cedar (tree)', *talu mo:-ni* 'birch tree' (literally: 'birch bark tree').

The possessive forms, however, are not used in the appositional constructions which denote a human being (13.8).

4.2.3.2.3. Gender relationship

The possessive noun can mean 'female' or 'male'. Different words are used with respect to different types of fauna: for birds and fishes: *eñece-ni* 'female' and

amina-ni 'male', for small animals *guas'a-ni* 'female' and *mugeti-ni* 'male', for most hoofed animals *eni-ni* 'female' and *logoso-ni* 'male', for some other animals *atiga-ni* 'female' and *zei-ni* 'male'.

(168)	a.	*ñau (en'ese-ni)*	'hen'
		ñau amina-ni	'rooster'
	b.	*z'oto guas'a-ni*	'otter female'
		z'oto mugeti-ni	'otter male'
	c.	*käŋa eni-ni*	'deer female'
		käŋa logoso-ni	'deer male'
	d.	*nakta atiga-ni*	'wild sow'
		nakta zei-ni	'wild boar'

The names of animal young are expressed by the possessive phrase as well: *ñau sita-ni* 'chick' (literally: 'hen's child'), *keige sita-ni* 'kitten' (literally 'cat's child').

4.2.3.1.4. Quality relationship

The noun-modifier of the possessive construction can express the quality or the attribute, and correspond to relational adjectives or compounds in the European languages, for example:

(169)	*zube se: ule:-ni*	'meat of two kinds'
	zakta sile-ni	'millet gruel'
	kü: gob'o-ni	'bee' (literally 'honey fly')

The semantic relationship between the components of such constructions is not specified within the construction itself, and their meaning varies largely. Note, however, that the type of material from which the object is made is expressed not with the possessive construction but with the relational adjectives (6.4.1.2.1).

4.2.3.1.5. Measure relationship

Possessive nouns express a measure or feature of the object. The semantic structure of these nouns necessarily invokes some relation to another entity, therefore they are never used without a Possessive suffix.

(170)	*gugdala-ni*	'its height'
	boko-ni	'its color'
	dä:mila-ni	'its thickness'

sagdila-ni	'its size'
bi ceŋele-i	'my weight'
uli suŋtele-ni	'the depth of the river'
baŋza eŋme-le-ni	'the width of the board'
umac'ala-ni	'its length (of something short)' (literally: its shortness)

4.2.3.3. Definiteness

Apart from the possessive meaning (possession in the strict sense and also the non-possessive relation between two entities), the 3rd person Singular non-reflexive Possessive suffix *-ni* optionally encodes the definiteness of the corresponding noun. By definiteness we mean identifiability, that is, the ability of both the speaker and the listener to uniquely identify a corresponding concept and establish its clear reference to a particular extra-linguistic entity. The noun marked as definite by the 3rd person suffix *-ni* is not a head of a possessive noun phrase. It neither has an overt ("possessive") modifier, nor is there a possessor recoverable from the context.

4.2.3.3.1. Situational definiteness

When the definiteness is set by the situation of speech itself, the Possessive suffix *-ni* denotes the definiteness of the corresponding noun, defined situationally. In examples (171) the potential possessor cannot be reconstructed at all, and the only function of the suffix *-ni* seems to be to encode situational definiteness. In (171b) the potential possessor of the object denoted by the word *uŋta-ni* 'his boots' is not known, and in any case has not been mentioned earlier in the text. Example (171c) describes a situation where the woman is dreaming about seven men she met earlier. They have been mentioned previously in the text, and the corresponding noun is marked by a Possessive suffix.

(171) a. *Ei mo:-wo-ni*   *kusige-zi*   *e-zi*
        this tree-ACC-3SG   knife-INST   NEG-IMP.2SG
        tinda.
        cut
        'Do not cut these trees with knives.'

      b. *Xokto-wo*   *b'a-ha-ni.*   *Gäŋa wanimi,*
        footprint-ACC   find-PAST-3SG   strides wide

      uŋta-ni   *sagdi*   *bi-si-ni.*
      boots-3SG   large   be-PAST-3SG
      'He found footprints. The strides had been long, and the boots had
      been large.' (Schneider 1935a: 4)

c. *Mamasa-ni*   *t'osi:*   *nada*   *kotoi-ti emekte-iti.*
    wife-3SG   dream.PRP   seven bald-3Pl come-3PL
    'His wife is dreaming: those seven bald men are coming.'

d. *Sei-ni*   *wac'a.*
    salt-3SG   little
    'Not enough salt.'

4.2.3.3.2. Situational definiteness in the expressions of time

Situational definiteness underlies the use of the 3rd person Possessive suffix with some words expressing periods of time. The possessor in this case is not recoverable from the context. These are the following words:

    (i) names of seasons: *tue* 'winter, in winter', *zua* 'summer, in summer', *bolo* 'autumn, in autumn', *neki* 'spring, in spring';

    (ii) parts of the day: *ineŋi* 'day, in the day', *dogbo* 'night, at night', *sikie* 'evening, in the evening', etc.;

    (iii) the year: *aŋa* 'year'.

In most cases these words must take the 3rd person Possessive affix, cf.:

(172) *ti: aŋa-du-ni*   'last year'
       aŋa-ni bagdini   'at the beginning of the year'
       aŋa-ni malaktaini   'at the end of the year'
       gä:ŋa dogbo-ni   'every night'
       gä:ŋa ineŋi-ni   'every day'
       ti: aŋa-du-ni   'last year' <that year-DAT-3SG>
       neki-ni dexi   'until (this) spring' <spring-3SG till>

Here the Possessive affix seems to express situational definiteness. However, these words are also used without the Possessive affix, and in this case their meaning is non-specific, generic or indefinite. Compare (173a) with the definite interpretation, and other examples in (173) which do not refer to any specific time. In (173b) the word *tue* 'in winter' is in fact adverbialized (see 10.1.2.1).

(173) a. *Bu-je*   *min-du*   *kusige-i*   *omo*
        give-IMP.2SG   me-DAT   knife-REF   one
        zua-zi-ni.
        summer-INST-3SG
        'Give me your knife for one summer.'

b. *Tue*   *mafa*   *ŋua-ini.*
winter   bear   sleep-3SG.
'In winter (every winter) the bear sleeps.'

c. *Bi   neki-we*   *aju:-mi.*
me   spring-ACC   like-1SG.
'I like spring (in general).'

d. *Bi   xusa-la*   *bolo-wo*   *ise:-mi.*
me   picture-LOC   autumn-ACC   see.PAST-1SG
'I saw autumn in the picture.'

4.2.3.3.3. Contextual definiteness

Definiteness may be defined through the context, namely, through a certain relationship with a previously mentioned element, which makes the corresponding noun definite as well. In (174a) the noun *sugzä-ni* 'fish' takes a Possessive affix showing that it is opposite to the 'animals' living near the stream because fish can be considered part of the river. In (174b) the noun *tüe-ni* 'the pole' takes a Possessive suffix because of its semantic relationship to the word *eke-le-ni* 'in this yard'.

(174) a. *Kuŋgede*   *bäsa-ni*   *bui-de*   *egdi*
empty   river-3SG   animals-FOC   many
sugzä:-ni-de   *egdi.*
fish-3SG-FOC   many
'This is the river named Empty, it has a lot of animals and a lot of fish.' (K 154)

b. *Eke-le-ni*   *bi-si-ni*   *tüe-ni.*
yard-LOC-3SG   be-PAST-3SG   pole-3SG
Boxoso   *tüe-ni*   *drug'afa*   *tukti-e-ni.*
hunchback   pole-3SG   in.the.middle   climb-PAST-3SG
'In his yard, there was a pole. The hunchback climbed up to the middle of the pole.'

In both cases in (174) the relationship encoded with the Possessive suffix can perhaps be viewed as a part/whole relationship and it is difficult to distinguish it from the relational meaning described in 4.2.3.2. However, such an interpretation is problematic in certain examples, such as (175), unless we consider the hares as actually part of the willow thicket:

(175) *sakt'ai*   *tukca-na-ni*
willow.thicket   hare-PL-3SG
'the hares living in the willow thicket'

Examples such as (174) and (175) can be characterized as instances of "reference-point" constructions. As has been suggested in the literature (Langacker 1991: 67–180, 1993), reference-point constructions are based on "the ability to invoke the conception of one entity for the purpose of establishing mental contact with another, that is, to single it out for individual conscious awareness" (Langacker 1993: 5). The basic idea is that, for example, in (174b) the entity *tüe-ni* 'pole' is conceived through its particular relationship to a previously evoked concept 'the yard', and since the 'yard' in this context is definite, this makes the noun phrase *tüe-ni* definite as well. Cross-linguistically, possessive constructions are known to play a central role among reference-point constructions. Likewise, in Udihe the reference-point relationship is marked by the Possessive affix *-ni*.

The expression of the reference-point relationship is not grammatically obligatory in Udihe and ultimately depends on how the speaker perceives the situation. For example, in (174a) the word *sugzä-ni* 'fish' bears the Possessive suffix, and apparently the speaker wants to emphasize its relationship to a previously mentioned river. The following example is similar to (174), and is taken from the same text.

(176) *Dulumtu*   *bäsa-ni,*   *o-lo-do*   *bui*   *anči,*
       Dulumtu   river-3SG   this-LOC-FOC   animal   no
       sugzä:-da   *anči.*
       fish-FOC   no.
       '(This is) the river Dulumtu, where there are neither animals nor fish.'
       (K 153).

In (176), which describes a situation identical to (174a), the word *sugzä* 'fish' is not marked by a Possessive suffix expressing the reference-point relationship, apparently because the speaker chose not to stress it.

Markers of contextual definiteness are fairly frequently hosted by the head of a relative clause, for example:

(177) *A:nta*   *e-iti*   *teh*   *ninta*   *teh-i-ni*
       woman   NEG-3PL   sit   man   sit-PRP-3SG
       bua-la-ni,   *sondo.*
       place-LOC-3SG   sin
       'Women do not sit on the place where men sit, it is a sin.' (SKK 314)

4.2.3.3.4. Partitive function

The 3rd person Plural possessive suffix *-ti* may serve to select an object which is a part of a larger group of definite objects ('one of them'). Its usage in this

function seems to be restricted to kinship terms and substantivized adjectives and quantifiers.

(178) *c'o ic'a-ŋi-ti* 'the youngest of them'<most small-AL-3PL> (K 139)
       zuŋe-ti 'both of them'

See also the examples in 11.1.3.2.

4.2.4. Functions of the Alienable Possessive

The suffix *-ŋi-* was conventionally said in 4.1.4.3 to express alienable possession. The alienable possessive forms marked with the suffix *-ŋi-* take an obligatory Possessive marker and are used as the head of the possessive noun phrase (on its syntax see 13.1). Thus, this suffix brings an additional meaning to the possessive construction. The meaning of the alienable possessive forms is not homogeneous, and clusters around five types: (i) temporary ownership (4.2.4.1); (ii) alienable possession (4.2.4.2); (iii) an abstract associative relationship through a certain activity (4.2.4.3); (iv) a substitutional meaning 'instead of something' (4.2.4.4); (iv) the predicative function (4.2.4.5).

4.2.4.1. Temporary ownership

Generally speaking any noun (including proper names) can take the suffix *-ŋi-* in certain contexts. This suffix indicates temporary ownership. Often the object used to be in the inalienable possession of another person (animal), but was produced, obtained, bought, stolen, won, or caught by the actual possessor. Thus, it is not the natural or primordial property of the present owner, but is rather an alienable possession.

For example, body parts are normally expressed by the regular possessive construction (4.2.3.1): *bi dili:* (< *dili-i*) 'my head' (1SG), *nakta imo:-ni* 'boar fat'. However, the ownership of somebody else's body part is expressed by the suffix *-ŋi-* on the possessed noun.

(179) *bi nakta dili-ŋi:* (< *dili-ŋi-i*) 'my boar head'
       <head-AL-1SG>
       si kuliga tekpu-ŋi: (< *tekpu-ŋi-i*) 'your snake skin'
       <skin-AL-1SG>
       bi imo:-ŋi: (< *imo:- ŋi-i*) 'my (boar) fat'
       <fat-AL-1SG>

The meaning of the suffix *-ŋi-* is here to encode the difference between these two cases. This suffix is often used with words referring to parts of an

(animal's) body or words such as *ule:* 'meat', *imo:* 'fat'. Fish and animals when considered as a fisherman's or a hunter's catch are usually regarded as alienable possessions, cf.: *bi nakta-ŋi: imo-ni* 'the fat of my boar'. This is especially common in situations connected with finding out or changing owners.

(180) a. *Bi*   *imo:-ŋi-we-i*   *teu*   *diga:-i*   *si*
       me   fat-AL-ACC-2SG   all   eat.PAST-2SG   you
       susa:-i.
       run.PAST-2SG
       'You have eaten my fat and run away.' (K 156)

     b. *Si*   *zomi:*   *bi*   *sugzä:-ŋi-we-i?*
       you   steal.2SG   me   fish-AL-ACC-REF
       'Are you stealing my fish?' (K 148)

     c. *E-zeŋe-i*   *igbesi*   *bi*   *si*
       NEG-FUT-1SG   frighten   me   you
       bui-ŋi-we-i.
       animal-AL-ACC-2SG
       'I will not frighten your animals.'

     d. *Giuse-ŋi:*   *mun-du*   *anči.*
       roe-AL.2SG   we.EX-DAT   no
       'Your roe is not at our place.' (K 107)

4.2.4.2. Alienable Possessive

For several words the expression of alienable possession is practically obligatory. In this they differ from, for example, body parts, for which the marking by the suffix *-ŋi-* is conditioned by the situation (4.2.4.1). Most words denoting various types of (alienable) property do not require the suffix of the Alienable Possessive and take the regular Possessive morpheme, for example: *nuani zugdi-ni* 'his house', *nuani tege-ni* 'his gown'. These are words denoting the house itself and various objects of housekeeping: clothes, weapons, boats, domestic animals other than a cow, and so on. However, some words that denote alienable possession as such require the suffix *-ŋi-*; these are as follows:

(i) *na:* 'land' when it is regarded as somebody's property where the relationship between the elements *na:* 'land' and *agba* 'state' is not treated as a relationship of alienable possession, hence the regular possessive construction is used; cf. (181a) and (181b);

(ii) *mo:* 'tree', whereupon its meaning changes to 'firewood which belongs to somebody' or refers to a tree which, for example, grows by somebody's house (182c);

(iii) *zä:* 'money';

(iv) *ja:* 'cow'.

(181) a. *Bija:-ŋi:*   *xonto*   *ni:*   *na:-ŋi-le-ni*
       me cow-AL.1SG   another man   land-AL-LOC-3SG
       ŋene:-ni.
       go.PAST-3SG
       'My cow went onto somebody else's land.'

      b. *Agba*   *na:-di-ni*   *bagdi-mi.*
       state   land-DAT-3SG   live-1SG
       'I live on state land.'

(182) a. *Mo:-ŋi-ne-mi*   *gada:-ni.*
       tree-AL-DEST-REF   buy.PAST-3SG
       'He bought firewood for himself.'

      b. *Su*   *mo:-ŋi-u*   *bie?*
       you tree-AL-2PL   be.PRES.HAB
       'Do you have some firewood?'

      c. *Bi*   *mo:-ŋi-ne-i*   *ketu*   *uligdig'a.*
       me tree-AL-PL-1SG   very   beautiful
       'My trees are very beautiful.'

(183) *Bi*   *zä:-ŋi:*   *xul'a-wa-ni*
     me money-AL.REF   extra-ACC-3SG
     neŋun-du-i   *bu-o:-mi.*
     younger.sibling-DAT-REF   give-PAST-1SG
     'I gave my extra money to my brother'.

(184) *Nua-ni bi*   *ja:-ŋi-we-i*   *gada:-ni.*
     he-3SG me   cow-AL-ACC-1SG   buy.PAST-3SG
     'He bought my cow.'

4.2.4.3. Associative relationship

The suffix *-ŋi-* does not necessarily express property, but can encode the connection of the corresponding element to another one (the 'possessor') which is realized through his/her activity.

4.2.4.3.1. Inanimate nouns

The suffix *-ŋi-* encodes an associative relation through a different kind of action, cf.: *I:bene la:-ni* 'a Japanese candle' and *I:bene la:-ŋi-ni* 'the candle given by a Japanese'. In the former case, we deal with relational possessive constructions such as those addressed in 4.2.3.2, and the 'possessor' *I:bene* 'Japanese' here simply replaces a relational adjective. In the latter case the suffix *-ŋi-* indicates

the situational relationship between the head noun *la:* 'candle' and the element *I:bene* 'Japanese', both of which could participate in a hypothetical implied predication 'a Japanese gave a candle'.

This type of possessive construction is known in other languages (cf. the English *John's book*, which can not only mean possession, but also "the book which John reads, edits, sells, etc."), but is very regular in Udihe. In this case a situational non-possessive relation is presupposed between the 'possessor' and the head noun. The relationship can be established between virtually any two entities associated in the discourse. The exact form of this relation is not expressed overtly, and therefore the construction itself is semantically undetermined. For example, *bi abuga-i käŋa-ŋi-ni* 'my father's deer' <me father-1SG deer-AL-3SG> does not necessarily mean ownership, but may refer to 'the deer my father followed, about which he was talking, etc.'. As noticed by Taylor (Taylor 1989), the meaning of relation in this sort of construction can only be characterized in the context of a person's encyclopedic knowledge of the relevant words (that is, concerning typical actions involving the entity in question). It may also be added that, at least in Udihe, the meaning of the construction is normally deduced from the discourse; the context and the con-situation play an important role here, since they usually set the type of relation unambiguously. Referential conflict does not happen because, first, the type of relation is usually introduced in the context or is clear from the con-situation; second, the possessor is highly referential and definite, cf.:

(185) a. *G'ai*   *uli-ŋi-ni*   *xuili:-ni.*
         crow   water-AL-3SG boil-3SG
         'The crow's water (the water brought by the crow) is boiling.'
      b. *Bi*   *tuduze-ŋi:*   *sagdä-ŋku.*
         me   potato-AL.1SG   big-PL
         'My potatoes (those cultivated by me) are big.'
      c. *Men-e*   *ñaŋña-ŋi-tigi:*   *degdegi-e-ni.*
         REF-0   sky-AL-LAT.REF   rise-PAST-3SG
         'He rose to the sky (where he lived).'
      d. *Bi*   *oloxi-we*   *mä:usa-la:-mi,*
         me   squirrel-ACC   gun-V.PAST-1SG
         e-si-mi-de   *wa:.*   *Oloxi-ŋi:*
         NEG-PAST-1SG-FOC   kill   squirrel-AL.1SG
         sus'a.
         escape-PERF
         'I shot at the squirrel but didn't get it. My squirrel escaped.'

In this meaning the suffix *-ŋi-* often attaches to the words denoting geographical objects (places) such as *uli* 'river', *bäsa* 'stream, small river', *xoto* 'town', *golo* 'country', and *bua* 'country' and indicates the place of living, cf.:

(186)   *Minti   bäsa-ŋi-fi*   *gegbi-si:-ti*   *Bikin.*
        we   stream-AL-1PL.IN   name-V-3PL   Bikin
        'Our river is called Bikin.'

4.2.4.3.2. Animate nouns

As distinct from the regular Possessive suffixes, the suffix *-ŋi-* can be hosted by nouns that denote living persons related to the possessor through some activity or situation (common work, proximity, etc.).

(187)   *minti zaŋä-ŋi-fi*   'our chief'
        <we chief-AL-1PL.IN>
        minti lauzi-ŋi-fi   'our farm-laborer'
        <we farm.laborer-AL-1PL.IN>
        e:ci-ŋi-ni   'his servant'
        <servant-AL-3SG>
        ni:-ŋi-ni   'his people'
        <man-AL-3SG>

With proper names *-ŋi-* presupposes that the corresponding person is well known to both the speaker and the listener. See (188) where (188b) is a spontaneous phrase addressed by one of our informants to his wife, referring to our visit to her. In (188c) Sergei may be a relative or friend of the interlocutor, or a person often spoken about.

(188)   a.   *Utebe*   *xunxuze*   *zaŋgä-ŋi-ni*
             so   Manchu.robber   chief-AL-3SG
             gune:-ni.
             say.PAST-3SG
             'So said the chief of the Manchu robbers.'

        b.   *Si   aziga-ŋi:*   *eme:-ni.*
             you   girl-AL.2SG   come.PAST-3SG
             'Your girl has come.'

        c.   *Si   Sergei-ŋi:*   *e-s'e*   *mamasa-la?*
             you   Sergei-AL.2SG   NEG-PERF   wife-V
             'Hasn't your Sergei married?'

        d.   *Bi   Šarika-ŋi:*   *aja*   *in'ei*
             me   Sharik-AL.1SG   nice   dog
             'My Sharik is a nice dog.'

Kinship terms including the word *sita* 'child' do not usually take the alienable possession suffix *-ŋi-*, but the words *b'ata* 'boy' and *aziga* 'girl' do. In this case

they mean 'son' and 'daughter' respectively and so the semantic oppositions 'son/boy' and 'daughter/girl' are expressed morphologically.

(189) a.   *Bu-je*   *min-du*   *si*   *aziga-ŋi:.*
         give-IMP.2SG   me-DAT   you   girl-AL.REF
         'Give me your daughter.'

     b.   *Bi*   *ze-i*   *b'ata-ŋi-ni*   *jexe-ini.*
         me   neighbor-1SG   boy-AL-3SG   sing-3SG
         'My neighbor's son is singing.'

The suffix *-ŋi-* can also be attached to the substantivized adjectives: *c'o ic'a-ŋi-ti* 'the youngest (of them)' <most small-AL-3PL> (K 139).

4.2.4.3.3. Associative relationship and definiteness

Remarkably, the alienable possession suffix *-ŋi-*, which expresses some kind of associative relationship (4.2.4.3.1 and 4.2.4.3.2), can co-occur with the 3rd person Possessive suffix marking the definiteness of the corresponding object (4.1.3.3).

(190) a.   *Waŋba-ŋi-ni*   *alasi:.*
         tortoise -AL-3SG   wait.PRP
         'It (the squirrel) is waiting for the tortoise.'

     b.   *Tukti-e-ni*   *mafa*   *mo:-ŋi-we-ni.*
         climb-PAST-3SG   old man   tree-AL-ACC-3SG
         'The old man climbed up the tree.'

In (190) the 3rd person affix *-ni* cannot refer to the (covert) subject because this would require a Reflexive Possessive marker and not a regular 3rd person marker. This suggests that the 3rd person marker here reflects contextual definiteness (4.1.3.3.3), while *-ŋi-* expresses an associative relationship between the two participants of the text in the sense of 4.2.4.3.2.

4.2.4.4. Substitutional meaning

Another meaning of the Alienable Possessive suffix *-ŋi-* is to denote a non-typical function of a thing or a person, which serves instead of another, usually in the subject or direct object function, cf.:

(191) a. *Bi-le*   *bagdi:*   *getu*   *zugu-ŋi-ni*
me-CONT   live.PRP   PL   otter-AL-3SG
o-zo-mi.
become-SUBJ-1SG
'I will become an otter for the people.' (K 126)

    b. *Bi* *tiu-ŋi:*   *bu-je*   *bi*
me pillow-AL.1SG   give-IMP.2SG   me
kapta-si:-le.
parcel-V.1SG-CONT
'Give me something as (instead of) a pillow so that I can roll it up.'

4.2.4.5. Predicative use of the Alienable Possessive

Nouns marked by the suffix of Alienable Possessive are used as the predicates of the copular construction. In this case, unlike previously described in 4.1.4.4, this suffix *-ŋi-* attaches not to the possessed noun but to the possessor, cf.: *b'ata-ŋi* 'the boy's'. Such constructions are addressed at greater length in section 17.2.2.3.

4.2.4.6. Derivational use

The alienable possession suffix may precede an adjectival derivational suffix *-xi*. Such cases are discussed in 6.4.1.1.2.

4.3. Nominal mixed categories

By "mixed categories" we mean special forms of nouns which demonstrate mixed behavior: their syntactic distribution is that of adjectives, but they show some "noun-like" properties as well. These forms are the Proprietive and Partitive. In their external syntax they behave like prototypical adjectives: they take a prenominal position within a noun phrase, they can be located discontinuously, they undergo modifier raising as do most adjectives (24.2.2.1.1), and may function as secondary predicates. These properties are not typical of nouns. However, in some other respects they behave like inflectional forms. Their underlying nouns preserve referentiality; therefore, they can head their own phrase, are compatible with some types of possessive marking, and are available for cross-reference later in the text. This indicates that the categorial status of the Proprietive and the Partitive cannot be determined unambiguously; they can be characterized as intermediate between inflection and derivation.

4.3.1. Proprietive

The Proprietive is derived with the suffix *-xi*. A similar pattern is typical for all cognate languages and is very productive. The resulting forms have a possessive meaning 'with X', denoting both alienable and inalienable possession. They can be derived from practically any noun.

(192) *zali-xi*   'with a store-house'   *zali*   'store-house'
       mä:usa-xi   'with a gun'   *mä:usa*   'gun'
       kusige-xi   'with a knife'   *kusige*   'knife'
       guzakta-xi   'with a beard'   *guzakta*   'beard'
       neŋu-xi   'with a younger   *neŋu*   'younger
                        sibling'   sibling'

The suffix *-xi* may be hosted by a noun which bears the Alienable Possessive marker *-ŋi*. Then it indicates the "associative" relation between the possessor (the head) and the possessed (the incorporated noun) according to the same principles which hold for the regular possessive construction (see 4.2.4), for example:

(193) *Belie-ŋi-xi*   *bi-si-ni.*
       fairy-AL-PROP   be-PAST-3SG
       'He had a fairy.' (SKX 262)

Like nouns, the Proprietive forms do not participate in a comparative or superlative adjective phrase, and do not take an adjectival Plural marker *-ŋku*. Further, they inherit the property of being modified by adjectives and numerals. In (194) an adjective modifies the noun incorporated into the Proprietive form. The modifying cardinal numeral here either takes the Instrumental case (195) or is in the Nominative (196).

(194) a. *Si   wanimi*   *xei-xi*   *sugese-i*
          you   long   handle-PROP   axe-2SG
          bie?
          be.PRES.HAB
          'Do you have an axe with a long handle?'
      b. *Sin-du*   *bie*   *xulaligi*   *waptä-xi*
          you-DAT   be.PRES.HAB   red   lid-PROP
          koŋz'o-i?
          box-2SG
          'Do you have a box with a red lid?'
      c. *Bi   ic'a   neŋu-xi*   *bi-mi.*
          me   little   younger.sibling-PROP   be-1SG
          'I have a little younger brother/sister.'.

d. *Nua-ni*   *xulaligi*   *xei-xi*   *kusige-i*
he-3SG   red   handle-PROP   knife-REF
nodo:-ni.
loose.PAST-3SG
'He has lost his knife with the red handle.'

(195) a. *zu:-zi*   *muze-xi*   *tue-ze*
two-INST   beam-PROP   winter-N
'a winter house with two beams' (K 25)

b. *di:n-zi*   *to:ŋdo*   *koso-xi*
<four-INST   straight   angle-PROP>
'rectangle' (literally: 'the one with four right angles') (Schneider 1936: 26)

c. *ila-zi*   *igi-xi*
three-INST   tail-PROP
'with three tails' (SK 355)

(196) a. *Nua-ni*   *zube*   *ugda-xi*   *bi:-ni.*
he-3SG   two   boat-PROP   be-3SG
'He has two boats.'

b. *Uta bede*   *digan-a-mi*   *Mejexi*   *kä:-la-ni*   *igi*
that like   say-0-IMP   Mejexi   side-LOC-3SG   tail
lumbulilie   *sul'ai*   *zu:*   *igi-xi*   *tukä:-ni.*
fluffy   fox   two   tail-PROP   run.PAST-3SG
'Having said that, a fluffy-tailed fox with two tails ran next to Mejexi.' (SKX 246)

The base noun may be modified by a reflexive possessive pronoun or a noun.

(197) a. *Bäsa*   *men-e-men-e*   *eze-xi.*
river   REC-0-REC-0   master-PROP
'Each river has its own master.' (SKX 308)

b. *Teti-gi:-ni*   *au-wa*   *bui*   *je-xi.*
dress-REP-3SG   cap-ACC   animal   antlers-PROP
'He put on a cap with the deer antlers.' (SK 128)

When the Proprietive form incorporates a noun of inalienable possession, an additional modifier is strictly obligatory. Cf.:

(198) a. *alagdig'a*   *ja:-xi*   *aziga*
<beautiful   eye-PROP   girl>
'the girl with the beautiful eyes'

b. **ja:-xi aziga*
<eye-PROP girl>

(199) a. *Bi   sagdi   ŋö:-xi   bi-mi.*
           me   big   nose-PROP   be-1SG
           'I have a big nose.'

       b. **Bi   ŋö:-xi   bi-mi.*
           me   nose-PROP   be-1SG

The noun underlying the Proprietive form can be anaphorically referred to in the following text.

(200) a. *Uti   zu   ni: xuñazi-xi   bi-si-ti.*
           that   two   man   elder.sister-PROP be-PAST-3PL
           Uti   'ana-du   bi-si-ni.
           that   boat-DAT   be-PAST-3SG
           'These two men had an elder sister. She was in the boat.'
           (Schneider 1937: 32)

       b. *Mafa-xi   bi-de   bi-si   emuge-we*
           husband-PROP   me-FOC   be-PAST   cradle-ACC
           o:-muse.
           make-COND
           'If I had a husband, he would make a cradle.' (SKX 170)

The examples below demonstrate the adjectival properties of the Proprietive forms. The sentences in (201) demonstrate the modifier raising construction. In this case the postnominal modifier is the locus of the case marking within a noun phrase. The postposed Proprietive forms are not marked by a possessive affix, but this is also typical of some adjectives (see 24.2.2.1.3).

(201) a. *Moxo   konz'o   wopti-xi-le   bi-s'e.*
           cup   box   cover-PROP-LOC   be-PERF
           'The cup was in the box with a cover.'

       b. *Bi   konz'o-i   wopti-xi   do-lo-ni*
           me   box-1SG   cover-PROP   inside-LOC-3SG
           bi   dei: bi:-ni.
           me   pipe.1SG   be-3SG
           'In my box with a lid there is my pipe.'

       c. *Min-dule   in'ei   zube   sita-xi   bie.*
           me-LOC   dog   two   child-PROP   be.PRES.HAB
           'I have a dog with two puppies.'

       d. *Nua-ni   alasi:-ni   sul'ai-we   zakpu-zi*
           he-3SG   wait-3SG   fox-ACC   eight-INST
           igi-xi-we.
           tail-PROP-ACC
           'He is waiting for the fox with eight tails.' (SK 351)

e. *Omo*   *aziga*   *xulaligi*   *ñukte-xi*
   one   girl   red   hair-PROP
   tukä:-ni.
   run.PAST.3SG
   'One girl with red hair came running.' (SKX 318)

In the following example the Proprietive form is clause-external and exhibits case agreement with the discontinuous "head", as is typical of regular adjectives (24.2.2.2.4).

(202) *Nua-ni*   *alasi-ni*   *sul'ai-wa*   *zakpu-zi*
   he-3SG   wait-3SG   fox-ACC   eight
   igi-xi-we.
   tail-PROP-ACC
   'He is waiting for the fox with eight tails.' (SK 351)

The Proprietive forms in the copredicative function are illustrated below.

(203) a. *Bi*   *ma:ma-i*   *tege-we*   *wo-ini*
   me   grandmother-1SG   gown-ACC   make-3SG
   oño-xi-zi.
   ornament-PROP-INST
   'My grandmother makes dresses (decorated) with ornaments.'

   b. *Nua-ni*   *tutulu*   *xuli:-ni*   *jagdugu-xi-zi.*
   he-3SG   always   walk-3SG   glasses-PROP-INST
   'He always walks wearing glasses.'

4.3.2. Partitive

The Partitive affix is *-lA* for both class I and class II nouns. The Partitive is basically restricted to only two functions. First, it is present in negative possessive constructions with the copula *anči*. Such constructions have a predicative (23.2.1.5.4) or attributive function (23.2.2.3) and can also function as a secondary predicate. In this function the Partitive is similar to the Proprietive. It is also compatible with the Alienable Possessive affix *-ŋi-*, cf. (204), but not with the regular possessive affixes.

(204) *Zä:-ŋi-le*   *anči*   *bi:-ni.*
   money-AL-PART   no   be-3SG
   'He has no money.'

Since nouns in possessive forms lack the Partitive, they co-occur with the copula in the Nominative form.

(205)   *Omo   ni: eme:-ni,   ikte-ni-de   anči.*
     one   man   come.PAST-3SG   tooth-3SG-FOC   no
     'One man came, he had no teeth.'

Like adjectives, the negative Partitive forms may be postnominal (206) or discontinuous with their head (207). In both cases the negative copula takes a case inflection that indicates the role of the head noun in the clause.

(206)   *Bi   da:mpi   mulexi: zawa-ŋku   anči-le   egdi*
     me   old   bucket.1SG   take-N   no-LOC   many
     zikte   bie.
     berry   be.PRES.HAB
     'There are a lot of berries in my old bucket without a handle.'

(207)   a.   *Bi   in'ei-we   ise:-mi   igi-le*
         me   dog-ACC   see.PAST-1SG   tail-PART
         anči-we.
         no-ACC
         'I saw a dog without a tail.'
     b.   *Bi   kusige-i   bu-o:-mi   ni:*
         me   knife-1SG   give-PAST-1SG   man
         ñukte-le   anči-du.
         hair-PART   no-DAT
         'I gave my knife to a bald person (a person without hair).'

The examples below demonstrate the negative Partitive forms in the function of a secondary predicate. The negative copula either takes the Instrumental form (208) or remains morphologically unmarked (209), cf. 19.6.2.

(208)   *Bui-we-ni   ku'ai-la   anči-zi*
     animal-ACC-3SG   ear-PART   no-INST
     b'a-kta-wan-ta-i-ze.
     get-DEC-CAUS-PERM-2SG-HORT
     'Make the animals not hear, (as if) they are deaf (literally: without ears).'

(209)   a.   *Uta-wa   b'a-i   keje-le   anči*
         that-ACC   find-PRP   language-PART   no
         zawa-iti.
         take-3PL
         'Having found it, they take it without saying anything.' (SK 312)

b. *Sita-ziga*   *tege-ne-ti*   *oño-lo*   *anči*
    child-PL   gown-PL-3PL   ornament-PART   no
    o:-ti.
    make-3PL
    'They make children's gowns without ornaments.' (SK 117)

c. *Ni: xaña-la*   *anči*   *bude-hi*   *jaza.*
    man soul-PART   no   die-PRP   of.course
    'Of course the man dies (when he is) without a soul.'
    (Schneider 1937: 44)

The following example illustrates that the noun underlying the Partitive form may be modified by an adjective.

(210) *Ei ic'a*   *suese-le*   *anči*   *ba:-za*
      this small   axe   no   place-N
      ge-tini-ni   *e-ini*   *xuli.*
      surface-LAT-3SG   NEG-3SG   go
      'He does not go to the forest without this small axe.'

Second, the Partitive denotes the second argument of the adjective *paki* 'skillful'; on this see 6.3.2.

Chapter 5
Nominal derivation

Historically, Udihe was rich in nominal derivational patterns, but few of them are productive in the modern language. All derivational suffixes attach to the bare stem. Some of them have parallels among verbal (Chapter 8) or adjectival (6.4.1) inflectional affixes. Normally a noun has only one derivational affix. However, the Diminutive *-zig'a* is compatible with virtually all concrete nouns, including those that are morphologically derived by means of another suffix.

Compounding as a means of nominal word formation is absent. Sunik (1997: 247) cites examples of the lexicalization of the combination "adjective+noun": *c'aligi sul'ai* 'polar fox' <white fox>, cf. also *kesi gele-ŋku* 'place for sacrifices' <luck ask-N> (K 254), cf. also *kuti mafa* 'tiger' <tiger old.man>. However, the degree of their lexicalization is hard to estimate.

5.1. Derivational suffixes

The following derivational suffixes are productive in modern Udihe.

(211) suffix	semantics	base words
-ziga	Diminutive	nouns
-ŋati	Destinative	nouns
-ŋkA	origin	nouns
-ŋku, -ŋkA	polysemantic	verbs and nouns
-ŋA:	'former'	animate nouns
-(ŋ)'Ai	mass nouns	nouns

Non-productive suffixes are presented below under 5.1.2.

5.1.1. Productive suffixes

5.1.1.1. Diminutive suffix *-zig'a*

The disharmonic Diminutive suffix *-zig'a* is the most productive of all nominal derivational suffixes and attaches to practically any noun with concrete semantics. The derived nouns have either a purely diminutive meaning (small quantity or size), or refer to toys or objects designated for children. In the word

the Diminutive suffix takes the rightmost position after the other derivational suffixes and before the inflectional markers, cf.:

(212)   *tukca-zi'ga*   'a little hare, a toy hare'
      b'ata-zig'a   'a little boy'
      moxo-zig'a   'a little cup'
      zolo-zig'a   'a small stone, pebble(s)'

With the uncountable mass nouns the Diminutive suffix denotes singularity, cf.: *ñukte-zig'a* 'one hair' (*ñukte* 'hair') *samikta-zig'a* 'one eyelash (*samikta* 'eye lashes').

It should be noticed that in the modern language the suffix *-zig'a* is often pronounced without laryngealization, that is, as *-ziga*. In this case it is homophonous with the Plural affix *-ziga* (4.1.2.1). They have a different origin, however: the Plural affix goes back to Chinese (1.5.1.2.2), while the Diminutive affix has Tungus parallels (Boldyrev 1987: 165).

For the words *kasanziga* 'puppy' and *aziga* 'girl' the underived base noun is unknown (cf., however, *a:-nta* 'woman' from Tungus-Manchu **asa*), but the component *-ziga* can be assumed to go back to the Diminutive suffix. When these words are pluralized, the component *-ziga* can occur twice within one word: *a-ziga-ziga* 'girls'.

5.1.1.2. Destinative suffix *-ŋati*

The general meaning of this productive suffix can be described as 'designated for X', where X is an object signified by the base noun. Most commonly it derives nouns denoting materials; that is, raw material prepared for producing something. In this case it corresponds to the suffix *-ing-* in English words such as 'suiting, toweling, shirting' (213a). In two cases the derived noun denotes a person (213b).

(213)   a.   *uŋta-ŋati*   'leather for sewing boots'   *uŋta*   'boots
           zugdi-ŋati   'building materials for a house' *zugdi*   'house
           ugda-ŋati   'a log for making a boat'   *ugda*   'boat'
           kusige-ŋati 'materials for making a knife'   *kusige* 'knife'
           zali-ŋati   'building materials for a barn'   *zali*   'barn'
     b.   *mafa-ŋati*   'fiancé, bridegroom'   *mafa*   'husband'
           mamasa-ŋat 'bride'   *mamasa* 'wife'

The nouns derived with the destinative suffix are close in their semantics to the Destinative Participles (7.6.1.3). However, as distinct from the latter ones they exhibit the syntactic and morphological properties of nouns, for example, they take personal affixes as demonstrated below.

(214) *Ei sexi*   *bi*   *tege-ŋati:.*
       this cloth   me   gown-N.1SG
       'This is my cloth for (sewing) a gown'.

5.1.1.3. The suffix of origin *-ŋkA*

The suffix *-ŋkA* derives nouns with the meaning 'inhabitant of X, a person who originated in X', where X is a place name. Such nouns are old kin designations and nowadays often serve as surnames.

(215)   *namu-ŋke*   'inhabitant of the seashore' (cf. *namu* 'sea')
       zugdi-ŋke   'household' (cf. *zugdi* 'house')
       dä:-ŋke   'inhabitant of a place located upstream'
       ezie-ŋke   'inhabitant of a place located downstream'
       solo-ŋko   'inhabitant of a place located upstream'
       xu:-ŋke   'inhabitant of the Khor riverbank'
       biki-ŋke   'inhabitant of the Bikin riverbank'
       sua-ŋka   'inhabitant of the Suai riverbank'
       xandau-ŋke   'inhabitant of the Khandau riverbank'

This suffix is very productive and attaches to recent borrowings from Russian, cf *jara-ŋka* 'inhabitant of the (comparatively new) Krasnyi Yar settlement' where it is hosted by the Russian word *jar* 'steep riverbank'. It may be etymologically related to the plolysemantic suffix *-ŋku*, *-ŋkA* (5.1.1.4).

5.1.1.4. Polysemantic suffix *-ŋku*, *-ŋkA*

This is a very common Proto-Tungus suffix with a wide range of meanings.
    (i) First and most regularly it derives deverbal nouns with the meaning of instruments, means, or tools.

(216)   *kai-ŋku*   'brake for leather'   *kai-*   'brake'
       akpu-ŋku   'broom'   *akpu-*   'sweep'
       la:-ŋku   'mill'   *la-*   'grind'
       te:-ŋku   'bench'   *te:-*   'sit'
       deu-ŋku   'bridge'   *deu-*   'cross'
       zawa-ŋku   'handle'   *zawa-*   'take'
       kiga-ŋku   'razor'   *kiga-*   'shave, mow'
       l'o-ŋku   'peg, rack'   *l'o-*   'hang'
       oño-ŋku   'pen, pencil'   *oño-*   'write'
       punde-ŋku   'camera'   *punde-*   'blow'
       weipti-ŋke   'a lace for a plait'   *weipti-*   'tie the plait'

kugesi-ŋku	'anvil'	*kuge-si-*	'forge'
te-ŋku	'chair'	*te-*	'sit'
buni-ŋku	'hunter's roar'	*buni:-*	'roar'(of a deer)
egde-ŋke	'a (magic) means'	*egde-*	'mean to do something'
ceŋele-ŋku	'weigh (measuring tool)'	*ceŋele-*	'weigh'
zi:-ŋku	'a low bench for cutting food'	*zi:-*	'cut'
xaŋa-ŋku	'a stone used by the shaman for guessing'	*xaŋa-si-*	'guess'

If such nouns are derived from a transitive verb, they normally preserve the ability to assign the Accusative case.

(217) *in'ei-we xekesi-ŋku*   'rope for tying down a dog'
 \<dog-ACC tie-N\>
 mäŋa-wa la-ŋku   'mill (a tool for grinding flour)'
 \<flour-ACC grind-N\>
 g'obo-wo koŋko-si-ŋku   'a tool for killing flies'
 \<fly-ACC beat-IM-N\>
 ima:-wa eisi-ŋku   'a tool for shoveling the snow'
 \<snow-ACC shovel-N\>
 iŋme-we akinde-ŋku   'needle-case'
 \<needle-ACC stick-N\>
 aŋma-wa xukte-ŋku   'a gossip'
 \<mouth-ACC wind-N\>
 uli-we gada-ŋku   'bucket'
 \<water-ACC carry-N\>

(ii) Second, the derived nouns may entail an abstract or resultative meaning.

(218)
nima-ŋku	'(fairy)tale'	*nima-si-*	'tell'
nagbu-ŋku	'riddle'	*nagda-*	'guess'
c'a-ŋku	'tickle'	*c'a-si-*	'tickle'
gegbe-ŋku	'berries'	*gegbe-*	'gather'
bude-ŋke	'death'	*bude-*	'die'
maga-ŋka	'murder'	*magi-*	'murder'
etete-ŋku	'work'	*etete-*	'work'
jexe-ŋku	'song'	*jexe-*	'sing'

(iii) Third, nouns derived according to the pattern in question occasionally have a locative meaning and refer to places of action.

(219) *wakca-ŋku*   'place for hunting'   *wakca-*   'hunt'
     au-ŋku   'place for washing'   *au-*   'wash'
     deu-ŋku   'bridge'   *deu-*   'cross the river'
     dawasi-ŋku   'place for fishing   *dawasi-* 'fish salmon'
                  salmon'

This locational meaning is very productive and can be derived from virtually all verbs, as illustrated in below.

(220) *Ei-tene*   *bi*   *oño*   *wo-ŋku-i,*
     this-CONT   me   ornament   make-N-1SG

     ei-tene   *bi*   *ŋua-ŋku-i*   *bä:-i,*   *ei-tene*
     this-CONT   me   sleep-N-1SG   bed-1SG   this-CONT

     bi   *deumpi-ŋku-i*   *bä:-i.*
     me   rest-N-1SG   bed-1SG

     'This is my place for embroidering, this is my bed for sleeping, this is my bed for having a rest.' (K 182)

Some nouns derived from intransitive verbs assign the Nominative case: *keku-ni do:- ŋku* 'cuckoo's perch' <cuckoo-3SG sit-N>.

(iv) Finally, for a closed class of words the suffix *-ŋku-* denotes persons. Some of these nouns are derived from other nouns.

(221) *degde-ŋku*   'a jolly person'   *degde-*   'raise, lift'
     gusi-ŋku   '(practical) joker'   *gusi-*   'play'
     boxoli-ŋku   'humpbacked'   *boxoli*   'humpback'
     kedeli-ŋku   'one-eyed'   cf. *kede-ligi*   'stripy'
     zo:-ŋku   'poor person'   *zo:-*   'need'
     zeu-ŋku   'bread-winner'(SK 211) *zeu*   'food'
     kaŋma-ŋku   'evil sorcerer'   *kaŋma-*   'practice evil
                                             magic'

5.1.1.5. The suffix *-ŋA:* 'former'

This suffix derives nouns from other nouns denoting living persons or adjectives characterizing them. Typically its semantics presupposes that the person named by the base noun was alive in the past but at the moment of speech no longer exists. Therefore the derived noun receives the meaning 'the late X; the deceased X; X who is dead now', for example: *sagda-ŋe:* 'the one who was old', *paga-ŋa:* 'the one who was stupid'. In the few sentence examples we have at our disposal the derived noun always takes the subject role, and it is not clear if it can correspond to the other syntactic positions.

(222) a. *Ei   zugdi-we   Iwana-ŋa: wo:-ni.*
          this house-ACC   Ivan-N   make.PAST-3SG
          'This house was made by the deceased Ivan.'

      b. *Anana   ami-ŋa:-i   e   bede   kepte-i bi-s'e.*
          long.ago   father-N-2SG   this   like   lie-PRP be-PERF
          'A long time ago your deceased father was lying like this.' (K 107)

      c. *Wala-ŋa: uŋta-ni,   imo-si: bebe.*
          lucky.hunter-N   boot-3SG   fat-V.PRP   EV
          'It turns out that the boots belonged to the (deceased) lucky hunter,
          they have fat.' (K 199)

Remarkably, nouns in *-ŋA:* cannot refer to someone if the speaker does not know
whether he is dead or not. For example, (223) cannot be used if you find a dead
bear in the forest and do not know who killed it. But it can be used when speaking
about a bear skin which has been lying on the floor of the house for many years if
it is known that the hunter died a long time ago.

(224) *Ei   soŋgo-wo   aja   wakca-i   ni:-ŋe: wa:-ti.*
      this bear-ACC   good   hunt-PRP   man-N kill.PAST-3PL
      'This bear was killed by men who were good hunters.'

This suffix is probably present in the word *muda-ŋa:* 'former wife' from *muda*
'end'. According to Simonov's and Kjalundzjuga's materials, it may also have a
pejorative meaning: *a:nta-ŋa:* 'damned woman (literally: former woman)' (SK
114), *wali-ŋa:* 'little raven' (SK 212).

The suffix *-ŋA:* exhibits a formal similarity with the marker of the
Imperfective Converb (7.5.2.2).

5.1.1.6. The mass nouns suffix *-(ŋ)'Ai ~ m'Ai / '-i*

One of the forms of this suffix is *'-i*, that is, it triggers the pharyngealization of
the stem-final vowel followed by /i/ in this case. The derived nouns refer to a
kind of thicket.

(225) *labug'a-i*   'ground covered with moss'   *labuga*   'moss'
      cafakt'a-i   'birch thicket'   *cafa-kta* 'birch
      talugd'a-i   'birch thicket'   *talugda* 'birch tree'
      sakt'a-i   'willow thicket'   *sakta*   'willow tree'
      amigd'a-i   'poplar thicket'   *amigda*   'poplar'

The suffix *'-i* often co-occurs with the mass noun suffix *-ktA* (6.3.1.7), so that
the resulting word ends in *-kt'Ai*.

(226)	*mo-kt'o-i*	'brushwood'		*mo:*	'tree'
	wo-kt'o-i	'grass thicket'		*wo-kto*	'grass'
	kömpo-kt'o-i	'thorny thicket'		*kömpo*	'thorn'

Examples of the suffix *-ŋ'Ai* with the same meaning are:

(227)	*kuŋka-ŋ'ai,*	'cedar thicket'	*kuŋka*	'cedar'
	kuŋka-m'ai			
	xulugda-ŋ'ai	'aspen grove'	*xulugda*	'aspen tree'
	dikte-ŋ'ei	'blueberry thicket'	*dikte*	'blueberry'
	köŋpo-ŋ'oi	'dog-rose thicket'	*köŋpo*	'dog-rose'
	sakta-m'ai	'willow thicket'	*sakta*	'willow'
	teukte-ŋ'ei	'cowberry thicket'	*teukte*	'cowberry'
	isompo-ŋ'oi	'bird cherry thicket'	*isompo*	'bird cherry tree'
	eigde-ŋ'ei	'lime tree grove'	*eigde*	'lime tree'
	ai-ŋ'a-i,	'fir tree thicket'	*ai-kta*	'fir-tree'
	ai-kta-ŋ'ai			
	kusikta-ŋ'ai	'Manchu nut thicket'	*kusikta*	'Manchu nut tree'

5.1.2. Non-productive suffixes

Certain nouns derived with non-productive suffixes do not have a morphologically unmarked counterpart in modern Udihe, but the base stem is recoverable from related languages.

5.1.2.1. Diminutive suffix *-s'A/-sA*

This suffix has two phonological variants, one of which exhibits a non-laryngealized vowel *-sA*. These variants go back to two different affixes (*sA* < *čA:n*, *s'A* < *čA:kA:n*), but the semantics seems to be basically the same. The suffix has a vague diminutive (or affectionate) meaning, but is not productive and occurs only in the designations of some animals (often females) and persons, including relations. The base name is not always obvious: in (228a) we cite the derived nouns for which it is present in the modern language, in (228b) those for which derivational relations can only be established historically. In the latter case we cite reconstructions of Common Tungus protoforms for comparison.

| (228) | a. | *kuliga-s'a* | 'small snake' | *kuliga* | 'snake' |
| | | *zoŋku-s'o* | 'poor man' | *zoŋku* | 'poor' |

mama-sa	'wife'	*mama*	'old woman'
puta-sa	'small bag'	*puta*	'bag'
joxo-s'o	'small pot' (K 242)	*joxo*	'pot'
mafa-sa	'old man'	*mafa*	'old man, husband'
muŋgi-s'a	'small shaman's beater'	*muŋgi*	'shaman's beater'
ina-s'a	'nephew, niece'	*ina-nta*	'nephew' (SK 374)

b.

gua-s'a	'female of small animals'	**uke-če:n*
nexu-s'e	'younger sibling'	**neku:n*
eñe-se	'female of fish or birds'	*eni-ŋe* 'mother'
logo-so	'male deer'	**löko-čo:n*
janda-sa	'badger'	**janda-čo:n*
kä:-sa	'sea eagle'	**kiya-ča:n*
l'a-sa	'bullhead (fish)'	**laka-ča:n*
giu-se	'roe'	**giw-ča:n*
nuge-se	'one-year-old boar'	cf. Manchu *nuxen*

5.1.2.2. The mass nouns suffix *-ktA*

This suffix is common to all Tungus languages and used to be very productive, although in modern Udihe this is no longer the case. Generally speaking, it is used to derive uncountable mass nouns with different meanings, in particular those of the following groups.

(i) plants and fruits: *mesi-kte~musu-kte* 'grapes' (cf. Manchu *muču*), *kusi-kta* 'Manchu nut' (cf. Nanai *koco*), *kö-kto* 'dog-rose (hips)' (cf. Manchu *k'o:k'o:n*), *teu-kte* 'cowberries' (Proto-Tungus-Manchu **tewu*), *xai-kta* 'dry grass put in boots for keeping warm' (cf. *xai-gu-* 'put grass into boots'), *za-kta* 'millet' (cf. Manchu *ze*), *leu-kte* 'a kind of water plant' (cf. Proto-Tungus-Manchu **lewe* 'swamp').

(ii) body parts and related substances: *iŋa-kta* 'wool' (**sinŋa*), *ofo-kto* 'feather' (cf. *ofo-di:-* 'pluck'), *sami-kte* 'eyelash' (< **sarmi-* 'blink'), *gua-kta* (or *guza-kta*) 'beard'(**gurga-*), *sulu-kta* 'gut' (**sila-*), *wai-kta* 'nail; star' (< **xosi-* 'scratch'), *ni:-kta* 'backbone' (**nierde-*).

(iii) dry substances: *oño-kto* 'sand' (**xoŋñi-*); *wo-kto* 'grass, hay; medicine, (gun)powder' (Proto-Tungus **oro-kto*).

(iv) plentitude of small animals or insects: *xumu-kte* '(autumn) mosquito' (**punmi-*), *gawa-kta* 'butterfly' (cf. Samarga *gawa-da*),   *sili-kte* 'worm' (**sili-*).

(v) abstract nouns: *m'ai-kta* 'energy, stamina' (K 307) (*m'ai* 'strong').

The same suffix is historically distinguished in the following words: *wa-kta* '(tree) bark' (**ura-*), *lifa-kta* 'mud' (**lipa-*), *sie-kte* 'thread' (**sire-*).

5.1.2.3. Collective suffix *-ntA*

The non-productive suffix *-ntA* occurs in a few words denoting either separate persons (229a) or a group of people (229b).

(229) a.	*a:-nta*	'woman'	cf. *a-ziga*	'girl'
	belie-nte	'fairy'	*belie*	'fairy'
	sagdi-nta	'old man'	*sagdi*	'big, old'
	ni:-nta	'man'	*ni:*	'man, person'
	ina-nta	'nephew'	cf. *ina-s'a*	'nephew, niece'
b.	*xa-nta*	'relatives'	*xa:*	'relative'
	za-nta	'cousins'	*za:*	'cousin'

The same suffix may also be present in the following words: *xe-nte* 'master', *bäo-nta* 'name of a people in fairytales'.

The suffix *-ntA-* was mentioned in Schneider (1936: 103) as a possessive Plural affix. However, it denotes the collective Plural in only a few words where it can be followed by other Plural suffixes, the general Plural *-ziga* or the possessive Plural *-nA-* (for example, *belie-nte-ziga*, *za-nta-ziga*, *xa-nta-na-i*). This shows that the forms with the affix *-ntA-* are lexicalized.

5.1.2.4. Locational suffix *-(u)zA*

This suffix derives nouns from other nouns, pronouns, or locative adverbial stems. The derived nouns denote the corresponding place.

(230)	*tue-ze*	'winter house'	*tue*	'winter'
	solo-zo	'upper side (about a stream)'	*solo-*	'upstream'
	ezie-ze	'the side down the stream'	*ezie-*	'downstream'
	do:-zo	'inner side'	*do:-*	'inside'
	amä:-za	'back side'	*amä:-*	'back'
	a:ŋa-za	'right side'	cf. *aja*	'good, nice'
	a-uze	'this side'	cf. *a-*	'this'
	zulie-ze	'place ahead'	*zulie-*	'before'
	ui-ze	'place above'	*ui-*	'above'
	xegei-ze	'place beneath'	*xegie-*	'under'
	kä:-za	'side'	*kä:*	'edge'
	ta-uze	'that side, opposite side'	cf. *ta:*	'that'
	bagä:-za	'opposite side'	*bagä-*	'opposite side'
	die-ze	'direction away from the river bank'	*die-*	'place away from the river'

ba:-za   'outer side'   ba: 'nature,
                                                                     space, sky'

Spatial nouns in -(u)zA, except for *tue-ze* 'winter house', are a base for the further derivation of spatial adverbs (10.1.1). In fact, they themselves exhibit a mixed behavior. On the one hand, they take certain adverbial case markers: the Accusative in '-fA instead of -wa, and the Ablative in -ŋAzi (10.1.1.1). However, they do not take the adverbial Ablative in -nigi, cf.:

(231)   di:-nigi   'far from the river (ABL)' (Adverb)
        die-ze-tigi   'from the space away from the river (ABL)' (Noun)

They are also ambivalent with respect to their external syntax. They partly behave like nouns: they may be modified by demonstratives (232) and can function as attributes within the noun phrase (233).

(232)   ta: die:-ze-tigi   'away from that bank'

(233) a.   a:ŋa-za ŋala-zi
            <right-N hand-INST>
            'with the right hand'
      b.   dieŋe-ze e:-le-ni
            <left-N side-LOC-3SG>
            'to the left (side)'
      c.   Ta-uze   xokto   ŋene:-ni.
            that-N   way   go.PAST-3SG
            'He went that way.'
      d.   zueze ta-uze e:-le-ni
            <table that-N side-LOC-3
            'on the opposite side of the table'
      e.   ei mo: a:ŋa-za e:-tigi-ni
            <this tree right-N side-LAT-3SG>
            'to the right from this tree'
      f.   Biki uli-ni bagä:-za e:-digi-ni
            <Bikin river-3SG opposite-N side-ABL-3SG>
            'from the opposite side of the Bikin'

Yet, they are mostly found in adverbial functions in various local case forms, cf.:

(234) a.   *Bi*   *a-uz'e-fe*   *ŋene-ze-mi,*   *si*   *ta-uz'e-fe*
         me this-N-ACC   go-SUBJ-1SG you   that-N-ACC
         ŋene-je.
         go-IMP.2SG
         'I will go this way, you go there (that way).'

       b.   *Zulie-ze-le* *igi,*   *amä:-za-la*   *igi.*
         front-N-LOC   tail   behind-N-LOC tail
         'Ahead is a tail, behind is a tail.'

       c.   *Ui-ze-le*   *čagza* *osi:*   *gune,*
         above-N-LOC   white become.PRP EV
         xegie-ze-le-de   *osi*   *gune.*
         below-N-LOC   become.PRP EV
         '(He sees:) the white (spot) is now over, now beneath.' (K 131)

       d.   *Omo*   *begdi*   *ba:-za-la,*   *omo*   *begdi*
         one   foot   place-N-LOC one   foot
         do-zo-lo.
         inside-N-LOC
         'One foot outside, one foot inside. ' (K 145)

       e.   *dieŋe-ze-li*   'along the place on the left'
         <left-N-PROL>

         dieŋe-ze-zi   'at the place on the left'
         <left-N-INST>

         a:ŋa-za-digi   'from the place on the right'
         <right-N-ABL>

5.1.2.5. Resultative suffix *-ptA/-ktA, -pti(le)/-kti(le)*

The suffix derives resultative nouns from base verbs and nouns. It is likely to be connected with the Decausative verbal suffix *-ptA-/-ktA-* (see 8.2.1.3), cf. also the element *-ptile* found in the passive Past Participles of the negative verb (7.6.1.2.2).

(235) a.   *kua-ktile*   'shavings'   *kua-*   'shave'
         gi:-ptile   'ends'   *gi:-*   'cut out'
         tai-ptile   'chips'   *tai-*   'collect'
         cam-(p)tile   'splinter'   *camna-* 'break'

       b.   *to:-pti*   'fireplace'   *to:*   'fire'
         saŋa-pti   'patch'   *saŋa*   'hole'
         imo:-pti   'epiploon'   *imo:*   'fat'
         euni-pti   'cross-piece'   *eu-nigi* 'across'
         sili-pti   'breast strap   *sili*   'collar'
                       in a dog harness'
         ula:-pti   'soaked fish'   *ula:-*   'soak'

	su:-pti	'leather rope'(SK 835)	*sui-*	'tie'
c.	*xule-pte*	'ash; remains'	*xule*	'remainder'
d.	*likpi-kti*	'cork'	*likpi-*	'close'
	teusi-kti	'container'	*teusi-*	'keep'

Since consonantal clusters *pt* and *kt* tend to vary freely (2.2.4.1), the Resultative nominal suffix can have two forms: *uña-pti* and *uña-kti* 'ring' (cf. *uña* 'finger'), *egbe-kti* ~ *egbe-pti* 'roof' (cf. *egbe-* 'to cover, to roof') (K 312).

Several derived words deviate from the regular meaning and imply a certain association between the objects denoted by the base noun and the derived noun: *dei-pti* 'lead' (cf. *dei-gi-* 'cover with lead'), *ada-pti* 'sleeve-case' (cf. *ada-* 'join, put together'), *t'a-pti* 'clay' (cf. *t'a* 'fallen tree'). Certain deverbal nouns derived from transitives preserve the valence pattern of the base verb, cf.: *banza moloko-wo teusi-kti* 'bottle for keeping milk' <bottle milk-ACC keep-N>.

5.1.2.6. Qualificative suffix *-lA*

This suffix derives denominal and deverbal nouns denoting people who can carry out a particular action perfectly. It can be translated as 'good at X, good at using X, can be featured by X', where X corresponds to the base stem. Cf. the Evenki *-la:n-* with the same meaning: *oño-lo:n* 'a good painter' from *oño-* 'paint, draw, write'. Examples:

(236)	*aki-la*	'a (lucky) harpooner'	*aki*	'harpoon'
	wa-la	'a (good, lucky) hunter'	*wa-*	'hunt, kill'
	jexe-le	'a (good) singer'(Schneider 1936: 42)	*jexe*	'song'

The same or a homonymous suffix could historically be present in the following words: *xata-la* 'girl', *ñau-la* 'boy, girl' (**ñaw-*), *ma:-la* 'dried whole salmon' (cf. *ma:* 'whole').

The qualificative suffix *-lA* is also typical of adjectives (6.4.1.1.4), and it is not excluded that the nouns listed here are in fact substantivized adjectives. However, they presently behave as nouns, for example, they can be modified by an adjective.

(237)	*Keige*	*ketu*	*aja*	*wa-la.*
	cat	very	good	kill-N

'Cats are very good hunters.'

5.1.2.7. The suffix -*xi*

This suffix is obviously connected with the adjectival possessive suffix -*xi* (6.4.1.2.2). It is mainly found in designations of animals, but the derivational relationships are not transparent in the modern language. Examples: *olo-xi* 'squirrel' (**xulu-*), *kuge-xi* 'a sort of bird' (cf. Ulch *kukaj*), *e-xi* 'frog' (**xere-*), *tibze-xi* 'lynx'(**tübze-*). Note also the following words: *sewe-xi* 'idol' (cf. *sewe-* 'ghost'), *mule-xi* 'bucket' (**mu:-le-* 'fetch water'), *zele-xi* 'hermine' (cf. Nanai *zeli*). The suffix -*xi* can also be suspected in *sumu-xi* 'hazel-hen', *cende-xi* 'crawfish', *sene-xi* 'hedgehog', *nasa-xi* 'heron'.

5.1.2.8. The suffix -*(mu~bu)gA*, -*(mu~bu~u~tu)gu*

Examples for the suffix -*(mu~bu)gA* and -*(mu~bu~u)gu* with unclear semantics are presented in (238a) and (238b), respectively.

(238) a.	*talu-ga*	'birch bark'	*talu*	'birch'
	bali-ga	'blind man'	*bali*	'blind'
	p'ai-ga	'piece' (Schneider 1936: 60)	*p'ai*	'piece'
	kumu-ge	'louse'	*kumu-di-*	'seek lice'
	kuli-ga	'snake'	**kuli-*	
	xalu-ga	'hammer'	**palu-*	
	wai-ga	'earring'	**xojpo-*	
	labu-ga	'moss' (Schneider 1936: 47)	**law-*	
	begdi-ge	'leg of a table,	*begdi*	'leg'
	takti-ga	'yew-tree'	cf. Manchu *takta*	
	ono-buga	'snuff' (K 276)	*ono-*	'snuff'
	cige-muge	'urinary bladder' (K 310)	*cige*	'urine'
b.	*kand-ugu*	'half'	**kondo*	
	safu-gu	'chopsticks'	*safu-li-ŋku*	'a box for chopsticks'
	un-ugu	'disease'	*uni-*	'be sick'
	zom-ugu	'thief'	*zomi-*	'steal'
	kiso-bugu	'quiver' (K 249)	*kiso-fu*	'quiver'
	sanña-mugu	'flue for smoke'	*sanña*	'smoke'
	mo:-mugu	'stack of firewood'	*mo:*	'tree, wood'
	ze:n-tugu	'left-hander'	*ze:-ŋeze*	'left'

5.1.2.9. The suffix *-mA*

This suffix occurs on only a few nouns. It is homophonous and may be connected etymologically with the polysemantic adjective suffix *-mA* (6.4.1.2.1).

(239) *kä-ma*   'rocky mountain'   *käi*   'hill'
                      (Schneider 1936: 45)
       kali-ma   'whale'   *kali*   'sig fish'
       kakči-ma   'flat cake'   *kakči-si-* 'bake'
       laukta-ma   (Iman) 'water plants'   cf. *laukta* (Bikin) 'water
                                                            plants'

5.1.2.10. The suffix *-gdugu*, *-gdigA*

Examples:

(240) *iŋme-gdugu*   'box for keeping needles' *iŋme*   'needle'
       ja-gdugu   'glasses'   *ja:*   'eye'
       dami-gdugu   'tobacco'   *dami-* 'smoke'
       je-gdige   'hero, young man'   cf. *jeu-* 'grow'

5.1.2.11. The suffix (')-*u*

Examples:

(241) *ad'a-u*   'twins'   *ada-*   'join, put together'
       bagä:-u   'enemy'   *bagä:*   'opposite'
       bogöso-u   'torturer'   *bogöso-*   'torture'
       bagd-u   'village'   *bagdi-*   'live'
       ze-u   'food'   cf. *ze-mui* 'hungry'
       gä-u   'oar'   **ge:*   'another'
       ami-kta-u   'sleepyhead'   cf. *amai*   'sleepy'
       kakt'a-u   'half'   *kakt'a*   'half'
       jat'a-u   'birth shelter' cf. *jata-si-* 'give birth'

5.1.2.12. The suffix of measures *-lA*

The productive suffix *-lA* derives abstract nouns of measures and parameters, usually from parametric adjectives or adverbs. The resulting noun always takes personal affixes (4.2.3.1.5).

(242) *eŋme-le-ni* 'width' *eŋme* 'wide'
egdi-le-ni 'multitude' *egdi* 'many, much'
nemne-le-ni 'breadth' *nemne-c'e* 'narrow'
dämi-la-ni 'thickness' *dämi* 'thick'
sagdi-la-ni 'size' *sagdi* 'big'
wani(mi)-la-ni 'length' *wani-mi* 'long'
suŋta-la-ni 'depth' *suŋta* 'deep'

The word *ceŋe-le-ni* 'weight' is derived from the noun *ceŋe* 'balance'.

For some nouns derived with the suffix *-lA* the meaning deviates from the usual pattern: *zugda-la* 'a house with a double sloped roof' (cf. *zugdi* 'house'), *ñuxa-la* 'spring, source' (cf. *ñuxan-* 'jump out').

The nouns of measure take the Accusative argument (17.2.2.1.3).

5.1.2.13. The suffix *-mule*

The suffix *-mule* is obviously related to the comitative postposition *mule* 'with' (10.2.2.2.4). As distinct from the postposition *mule*, it is phonologically bound to the stem and does not bear an independent stress. However, it is disharmonic with respect to vowel harmony (3.3.2.3). The suffix derives the following closed class of nouns meaning close symmetrical relationship between two or more people:

(243) *gagda-mule* '(married) couple' *gagda* 'the other'
tie-mule 'pair' *tie* 'pair'
anda-mule '(married) couple' *anda* 'friend'
xunazi-mule 'sisters' *xunazi* 'elder sister'
xa:-mule 'brothers' *xa:* 'sibling'
zalä-mule 'cousins' *za:* 'relatives'
nimeŋke-mule 'neighbors' *nimeŋke* 'neighbor'
getu-mule 'comrades' *getu* 'comrade'
saŋgita-mule 'relatives by marriage' *saŋgita* 'relative'
bagäbu-mule 'doubles' *bagäbu* 'similar'
'aga-mule 'brothers' *'aga* 'elder brother'

neŋu-mule 'younger siblings *neŋu* 'younger sibling'

uil'e-mule 'wives of one man' *uil'e* 'a little girl who lives in the house of her future husband'

zue-mule 'wives of one man' *zue* 'a wife taken from a different clan in exchange for another woman'

The words cited above are regular nouns, cf. the examples below where they appear in a case form (Dative in (244a), Accusative in (244b)), or are modified by an adjective (245) or a numeral (246). Example (246b) shows that they may refer to more than two people.

(244) a.   *Uŋta*   *tie-mule-du*   *siŋe*   *ono-no-mi*
             boot   pair-N-DAT   mouse   nest-DEST-REF
             wo:-ni.
             make.PAST-3SG
             'A mouse made a nest in the pair of boots.'
         b.   *Bi ise:-mi*   *gagda-mule-we*   *uligdig'a-ŋku.*
              me see.PAST-1SG   other-N-ACC   beautiful-PL
              'I saw a beautiful couple.'

(245)   *Bue-ti ketu*   *aja*   *anda-mule*   *bi:-ti.*
          he-3PL   very   nice   friend-N   be-3PL
          'They are a very nice couple.'

(246) a.   *Bagdi:-ti*   *zu:*   *'aga-mule.*
             live-3PL   two   elder.brother-N
             'There live two brothers.'
         b.   *ila*   *xunazi-mule*
              three   sister-N
              'three sisters'

The nouns derived with *-mule* take the regular Plural affix *-ziga*, for example, *xa:-mule-ziga* 'brothers' (SK 985). They are not present with regular possessive suffixes in our material, but used in the predicative function they are compatible with the Alienable Possessive suffix *-ŋi* (4.1.4.4).

(247)   *Ni*   *ugda-ni?*   *Zu:*   *xa:-mule-ŋi.*
          who   boat-3SG   two   sibling-N-AL
          'Whose is the boat? The two brothers.'

5.1.3.14. The suffix *–gdA, -gdu*

This denominal suffix derives certain tree names (248a) and some other nouns (248b), cf.:

(248) a.   *talu-gda*   'birch tree'   *taku*   'birch tree'
             xulu-gda   'aspen tree'   *xulu*   'aspen tree'

b.	*kä-gda*	'ice'	*kä-ŋgu*	'slippery'
	dawama-gda	'net for salmon'	*dawa*	'salmon'
	xo:-gdo	'upper part of a leather brake'	*xo:*	'roof, top'

5.1.3.15. The suffix *-mzi,-mdi*

This is a common Tungus suffix rare in Udihe (cf. Ulcha *beleči-mdi* 'helper' from *beleči-* 'help', *wa:iča-mdi* 'hunter' from *wa:iča-* 'hunt'). It derives animate nouns from other nouns, adjectives, and adverbs, cf.:

(249)	*boŋgo-mzi*	'leader, first dog in a team'	*boŋgo*	'first, main'
	ño(lo)-mdi	'leader'	*ño:*	'ahead'
	sagdi-mdi,			
	sagdi-mzi	'the oldest man'(SKX 308)	*sagdi*	'big'

The word *tefesi-mzi* 'leader' (from *tefesi-* 'lead') was created by Schneider (Schneider 1936) according to the existing pattern (which was apparently productive at that stage). Cf. also the same-subject Perfective Converb form with the suffix *-mzi* in the Northern dialect (1.3.2.4) and a number of *Nomina agenti* cited in Sunik (1968: 218).

5.1.3.16. Other suffixes

Each of the following suffixes occurs in only a few words.

-mni-
bele-mni 'helper' (*bele-* 'help'); *tatu-mni-* 'teacher' (cf. *tatusi-* 'teach'); this suffix is very productive in other Tungus languages.

-mti
dulu-mti (or: *dulu-mtu*) 'the third finger; the middle prong of the harpoon' (cf. *dulä* 'middle brother'); *jaŋca-mti* 'rudder' (cf. *jaŋca-* 'steer').

-ktu
zeŋme-ktu 'greedy-guts' (*zeŋme* 'greedy'), *cem(i)ne-ktu* 'liar' (*cemne-* 'lie'); this suffix denotes a person by a (negative) quality and is homophonous with the suffix of the Resultative Participles (7.6.1.4).

-mpA(i)
zegde-mpe 'burnt wood' (*zegde-* 'burn'), *siza-mpa(i)* 'young trees thicket' (*siz'ai* 'thicket') (K 284); *ikte-mpei* 'young fir tree thicket' (*ikte* 'young fir tree').

-tigi, -tige
mak-tigi 'tool for spinning rope' (< *makci-* 'spin'); *kefu-tige* 'cartilage' (cf. *kefu-ge-* 'gnaw').

-fA

co-f'o 'claw' (cf. *cosu-le-* 'scrape').

-dugu

u:-dugu 'scratching tool' (*u:-* 'scratch').

-nige

e-nige 'side prongs of the harpoon' (*e:-* 'side'), *bu-nige* 'beyond the grave world' (cf. *bu-de-* 'die').

-(či)ŋ'A

alagdi-ŋ'a 'beauty' (cf. *alagdig'a* 'beautyful'), *pakči-ŋ'a* 'master (cf. *paki* 'skilful').

-mAgdA

derives de-numeral nouns: *ila-magda* 'three (in games)' (*ila* '3'), *di:-megde* 'four' (*di:* '4'), *tuŋa-magda* 'five' (*tuŋa* '5'), *ñuŋu-megde* 'six' (*ñuŋu* '6'), *nada-magda* 'seven' (*nada* '7').

-ntu

ze:-ntu 'left-hander' (cf. *ze:-ŋeze* 'left side').

-kA, -ku

mama-ka 'old woman' (*mama* 'grandmother'), *puta-ka* 'crop, craw' (K 279) (*puta* 'bag'), *sou-ku* 'tease, teaser' (K 287) (*sou-* 'pick on').

5.2. Zero-derivation

By zero-derivation we mean a type of word formation by which a word is shifted into another grammatical class without morphological marking. In fact, this is not widely spread in Udihe. Besides, when a noun and a corresponding verb have the same stem, the direction of the derivational process is not easy to establish. We will start from the idea that in a pair "concrete noun - verb" the base word is typically a noun, while in a pair "abstract noun - verb" the direction is the opposite. In both cases, however, the decision is conventional. Noun-to-verb conversion is treated in 8.4.2. A few hypothetical cases of verb-to-noun conversion are presented below (5.2.1), together with participle-to-noun conversion (5.2.2), and adjective-to-noun conversion (5.2.3).

5.2.1. Verb-to-noun conversion

Action nominals may be derived from the corresponding verbal stems through zero-derivation.

(250) *zima*   'visit, guests'   *zima-*   'go on a visit'
      bude   'death'   *bude-*   'die'
      bagdi 'life'   *bagdi-* 'live'
      tukä: 'running'   *tukä:-* 'run'

The only function of converted nouns of this type is to fill the object valency of certain verbs listed in 14.3.1.4. In this case they take the Accusative affix *-wA* but do not inflect for person. With respect to their external syntax, they show some verbal properties, namely, they preserve the valencies of the corresponding verb (251) and can be modified by an adverbial (252). Note that the complements of these deverbal nouns either precede (251b, 251c) or follow them (251a). Example (251a) additionally demonstrates that the converted nouns can be derived from the verbal stem inflected with an aspectual (Repetitive) affix, while sentences (253) show the passive variants of the action nominals.

(251) a. *Sagdi*   *ma:ma*   *ča:la-ini*   *bu-gi-we*
       big   grandmother   want-3SG   give-REP-ACC
       sita-wa.
       child-ACC
       'The Great Grandmother agrees to give the child.' (SKX 296)

    b. *Bi* *sin-tigi*   *dian-a-wa*   *ei-mi*   *ča:la.*
       me you-LAT   say-0-ACC   NEG-1SG want
       'I don't want to talk to you.'

    c. *Belie*   *ča:la:-ni*   *nexus'e*   *jegdige-le*
       fairy   want.PAST-3SG   younger   brother-LOC
       mafa-la-wa.
       husband-V-ACC
       'The fairy agreed to marry the hero, the younger brother.' (SKX 230)

(252) a. *Od'o*   *ba:-za*   *ge-le-ni*
       grandfather   place-N   surface-LOC-3SG
       bagdi-we *aju-ini.*
       live-ACC   like-3SG
       'Grandfather likes to live in the forest.'

    b. *Nua-ni* *ča:la:-ni*   *ña*   *jexe-we.*
       he-3SG   agree-PAST-3SG   again sing-ACC
       'He agreed to sing again.'

    c. *Bi ei-mi*   *aju*   *tuge-zi*   *tukä:-wa.*
       me NEG-1SG   like   quick-INST   run-ACC
       'I don't like to run quickly.'

(253) a. *Ma:ma*   *ise-u-si:-ni*   *ono-do*
       grandmother   see-CAUS-IM-3SG   how-IND
       siekte-we   *tompo-u-wa*   *sumu-zi.*
       thread-ACC   twist-PAS-ACC   tendon-INST
       'Grandmother is showing how to twist threads with tendons.'
       (SK 393)

b. *Ise-we-je*   *ono* *gakpa-si-u-we.*
  see-CAUS-IMP.2SG   how arrow-V-PAS.PRP-ACC
  'Show (me) how to shoot arrows.' (SKX 88)

Other nouns of this type seem to have undergone further substantivization, as, for example, the following:

(254) *teluŋu* 'story'   *teluŋu-* 'tell'
   jexe 'song, singing' *jexe-* 'sing'
   etete 'work'   *etete-* 'work'

They take all inflections typical of nouns and are modified by a demonstrative or an adjective, rather than by an adverb, cf.:

(255) **Bi** *ei* *etete-we* *metu-zeŋe-i.*
   me this work-ACC finish-FUT-2SG.
   'I'll finish this work.'

5.2.2. Participle-to-noun conversion

5.2.2.1. Destinative Participles

The Destinative Participles with the suffix *-kči* (7.6.1.3) undergo substantivization. This process is fairly productive. The resulting nouns denote places, containers, or objects designated for a particular action.

(256) *(zä:) nekce-kči* 'purse'   *nekce-* 'keep'
   (zä:) teuse-kči 'purse'   *teu-* 'load'
   la-kči   'mill'   *la-* 'grind'
   mule-kči 'ice-hole'   **mu:-le-* 'fetch water'
   kuge-kči 'bellows'   *kuge-* 'forge'
   adamasi-kči 'mountain pass' *adamasi-* 'cross the mountain'

   dawasi-kči 'place for fishing salmon' *dawasi-* 'fish salmon'

   dausi-kči 'river crossing' *dau-* 'cross the river'

The converted nouns demonstrate all the morphological and syntactic properties of regular nouns, however, they are able to assign the Accusative case, as are transitive base verbs, for example: *dami-we teuse-kči* 'snuff-box' (*dami* 'tobacco', *teuse-* 'keep').

5.2.2.2. Present active participles

Some impersonal Present active participles form stable lexicalized expressions with the noun (257) or are substantivized by means of the Collective Plural word *getu* (258).

(257) *wakca-i ni:*   'hunter' (hunting man)
<hunt-PRP man>
xuda-si: ni: 'merchant' (selling man)
<fur-V.PRP man>

(258) *xuda-si: getu*   'merchants'
<fur-V.PRP PL>
wakca-i getu   'hunters'
<hunt-PRP PL>
ise-ne-i getu   'audience (literally: seeing people)'
<see-DIS-PRP PL>

The participle can sometimes be postponed (raised), cf.:

(259) *zube ni: xuda-i getu*   'two merchants'
<two man fur-PRP PL>

5.2.3. Adjective-to-noun conversion

Virtually every adjective may receive certain nominal properties within a headless noun phrase (22.2.3). When they refer to persons they can be pluralized with the collective word *getu*, see 6.1.2.1. Examples of lexicalized substantivized adjectives are: *koto* 'bald one' (cf. *nada koto* 'seven bald ones'), *di:n-zi to:ŋdo koso-xi* 'rectangle' <four-INST straight angle-ADJ> (Schneider 1936: 26), cf. also several substantivized adjectives originally derived with the suffix *-mA* (6.4.1.2.1) such as *xala-ma* 'two-teeth harpoon' (*xala* 'forked branch'), *sigili-me* 'thick soup' (*sigili-* 'stir'), and *kä-ma* 'rocky mountain' *(kä:* 'edge'). Obviously nouns in *-xi* that denote animals (5.1.2.7) are also a result of such substantivization, as well as nouns in *-(n'A)use* (see 6.4.1.4.1). An example of lexicalized ideophonic adverb is *montom-ziga* 'circles (PL)'.

Chapter 6
Adjectives

This chapter deals with the inflectional and derivational categories of adjectives. Unlike nouns and verbs, Udihe adjectives represent a rather vague grammatical class. In many respects they behave morphologically and syntactically like nouns and attributive verbs (participles).

Like nouns, adjectives function syntactically as attributive modifiers (13.2), or as predicates (17.2.2.1.1), and may sometimes function as arguments (see Chapter 14 and 22.2.3). Under certain conditions they demonstrate at least some of the properties of the noun phrase (24.2.1.1). Like nouns, in some syntactic positions they inflect for case and number and take possessive affixes. A formal distinction between nouns and adjectives can, however, be made, using the following criteria: (i) most attributive adjectives can undergo syntactic raising (24.2.1.1), whereas nouns in the attributive function never raise; (ii) certain classes of adjectives can function as the syntactic head of an adjectival phrase that includes degree adverbials and a standard of comparison (6.3.4), whereas nouns never can; (iii) plurality is expressed for adjectives by the morphological marker *-ŋku*, which is not used for nouns.

Adjectives and participles are similar with respect to their syntactic behavior as attributes: both these categories can raise within the noun phrase and acquire certain head properties (see 24.2.1.1 on raised adjectives and 19.2 on raised participles within the relative clause). The following are the formal criteria that separate adjectives from participles: (i) (active) participles are not used as independent finite predicates, whereas adjectives are; (ii) on the other hand, adjectives do not function as subordinate clause predicates; (iii) only a few adjectives (6.3.3) take more than one argument, whereas participles preserve the valence patterns of the corresponding verb; (iv) participles may not be modified by the noun phrase that corresponds to the standard of comparison; (v) participles do not take the Plural affix *-ŋku*, which is typical only of adjectives (plurality of participles is expressed by other means); (vi) participles follow the derivational morphology of verbs, whereas adjectives have special derivational affixes (6.4.1.1).

Adjectives fall into two large groups that are characterized by different syntactic and morphological properties: simple adjectives and compound adjectives. Their morphology is described in sections 6.1 and 6.2 respectively. The main properties of the adjectival phrase are discussed in 6.3; the formation

of adjectives is addressed in section 6.4, where 6.4.3 deals specifically with compound adjectives.

6.1. Inflection of simple adjectives

Simple adjectives either function as predicates (17.2.2.1.1), or in the attributive function (13.3). As will be shown in 13.2, within a noun phrase which is neutral with respect to information structure the adjective modifier is prenominal and does not take any morphological markers except for the optional Plural affix. When attributive adjectives undergo modifier raising (24.2.1.1), they are postnominal and inflected for case, number, and possession. When the head noun is not overtly present (22.2.3), or when the attributive adjective is located discontinuously with respect to it, the adjective takes case and number inflections. Independent adjectives in certain case forms function as arguments (Chapter 14) and function as temporal adjuncts (15.4.2.1). Used in the predicative function, adjectives inflect for number (17.2.2.1.4) and can sometimes take possessive affixes (24.3.2.1).

Information on the syntax of these constructions is provided in the corresponding sections. Here we only describe the peculiarities of the adjectival inflection.

6.1.1. Adjectival stems

As shown in 6.4, adjectives do not constitute a uniform class with respect to their formation: they can be derived with numerous derivational affixes, by means of conversion and compounding. Morphologically simple adjectives seem to conform to the general property of nouns and verbs with respect to two classes of stems: they exhibit class I (vowel-final) stems and class II (*n*-final) stems. Adjectives that have *n*-final stems follow the peculiarities of the *n*-declension typical of nouns (see 4.1.1). However, in the modern Southern dialect only a few adjectives belong to this morphonological class. These are the quantitative adjectives *wac'a* 'little, few', *egdi* 'many, much, numerous', and *teu* 'all' addressed in 11.2. Compare their Accusative forms demonstrating the affix *-mA* typical of the class II declension: *wac'a-ma*, *egdi-ma*, and *teu-me-ni*, correspondingly.

Other class II adjectives have undergone a process of unification with class I stems. For the following adjectives Schneider (1936) marks the class II declension: the quantifier *xa-ni* 'some', the adjectives *(ŋ)ic'a* 'small' and *inigi* 'vivid'. At present, Accusative forms ending in *-mA* are no longer used for these adjectives by most speakers, although the variant *ic'a-ma* is not absolutely impossible, cf.:

(259) *Min-du*   *ic'a-ma*   *bu-je.*
me-DAT   small-ACC   give-IMP.2SG
'Give me a small one.'

We can also hypothesize that the traces of *n*-final adjectival stems are present in *n*-initial derivational affixes that exhibit alternation, such as, for example, the affix *-n'Ause ~ (')-use* (6.4.1.4.1). Some other *n*-initial affixes (or those beginning with *ŋ* before the velar) do not exhibit variations of this type, but the data from closely related languages demonstrates that initially the suffix did not begin with the nasal. So after the unification of the class I and class II adjectival stems in Udihe the morpheme boundary must have moved. Cf., for example, the Udihe suffixes *-ndima* (6.4.1.1.7) and *-ŋku* (5.1.1.4) and the comparative data from related languages.

(260) a. Ulcha

nada(n)	'seven'	*nadan-duma*	'the seventh'
duli(n)	'middle'	*dulin-duma*	'the middle'
a:ga	'(elder) brother'	*ag-duma*	'the eldest brother'

     b. Nanai

megdin	'precipice'	*megdiŋ-ku*	'steep'
murun	'mind'	*muruŋ-ku*	'clever'
mue	'water'	*mue-ku*	'juicy'

6.1.2. Inflectional categories

The following inflectional categories of adjectives will be described here: number, case, and Possession. The order of morphemes in the adjectival word is as follows:

(261)   stem – number – case – Possessive

For example:

(262)   *ic'a-ŋku-we-ni*   'small'   <small-PL-ACC-3SG>

6.1.2.1. Number

The Singular is not morphologically marked, while the Plural may be expressed with special morphological means (6.1.2.1.1). It can also be rendered by the restrictive particle *m'ei* 'all, entirely, only, exclusively' (12.1.1.9.3) when it immediately follows the adjective.

For substantivized adjectives referring to animate persons within headless constructions (22.2.3) plurality is marked with the Plural word *getu* compatible only with nouns, cf.: *baja getu* 'rich ones', *sisiga getu* 'diligent ones', and *bali getu* 'blind ones'.

6.1.2.1.1. Plural marker -*ŋku*

The Plural marker of the adjective is -*ŋku*. Normally only non-derived adjectives or adjectives derived with non-productive affixes take the affix -*ŋku*, for example: *imexi-ŋku* 'new (PL)', *maŋga-ŋku* 'strong (PL)', *nemne-s'e-ŋku* 'narrow (PL)'. In a few words the final /i/ of the stem changes to /ä/ before -*ŋku* (cf. 2.1.4.7).

(263) SG   PL
      sagdi   'big'   *sagdä-ŋku*
      agbi   'wide'   *agbä-ŋku*
      wani-mi   'long'   *wanimä-ŋku*
      dämi   'thick'   *dämä-ŋku*

Adjectives of color (6.4.1.1.3), time (6.4.1.3.1), possession (6.4.1.2.2), and material (6.4.1.2.1), derived with the suffixes -*ligi*, -*fi/-pti*, -*xi* and -*mA*, respectively, do not take the Plural suffix -*ŋku*. Instead, they are often accompanied by the restrictive particle *m'ei* (see 12.1.1.9.3), which can signify plurality.

6.1.2.1.2. Function of adjective Plural forms

As shown in 4.2.1, the expression of plurality in nouns is not grammatically obligatory and depends on how the situation is perceived by the speaker. Normally the exact interpretation of number can only be understood from the context. The adjective is more consistent in this respect: often it is marked for plurality even if the noun it modifies is not. Altogether, Plural agreement within the noun phrase with the adjectival modifier is not obligatory (see 13.2.2).

Most regularly, the Plural is morphologically marked on the adjective when the noun it modifies corresponds to the subject or the direct object role. Both the prenominal and postnominal (raised) adjective may be marked for plurality, cf.:

(264) a. *Min-du*   *imexi-ŋku*   *mo:-wo*   *juŋkäla:-ti.*
          me-DAT   new-PL   tree-ACC   fetch.PAST-3PL
          'They fetched me new firewood.'

b. *Min-du   mo: imexi-ŋku-we   juŋkäla:-ti.*
me-DAT   tree   new-PL-ACC   fetch.PAST-3PL
'They fetched me new firewood.'

When the head noun does not correspond to the subject or the direct object, the Plural marking on the adjective is rare with the exception of the copredicative adjective in the Instrumental (19.6). Cf., however, the following example:

(265) *Ic'a-ŋku   pei-zi   tokto-so.*
small-PL   piece-INST   cut-PP.PAS
'It is cut into small pieces.'

In constructions with a discontinuous modifier (24.2.2.2), or with head noun ellipsis (22.2.3), the Plural marker -*ŋku* is usually overtly present on the adjective.

Adjectives in the predicative function typically take the Plural marker which regularly signalizes plurality of subject. For further information on Plural agreement in copular adjectival constructions and examples see (17.2.2.1.4).

6.1.2.2. Case

As argued in 13.2, under neutral communicative conditions an adjective in the attributive function does not inflect for case, so case agreement between the modifier and the head noun is absent (exceptions are certain quantificational adjectives, see 13.3.4). Adjectives take case affixes only when they belong to one of the following syntactic types:

(i) a substantivized adjective within a headless noun phrase (22.2.3);
(ii) a discontinuous attributive modifier (24.2.1.2);
(iii) a raised attributive modifier (24.2.1.1);
(iv) an independent copredicative adjective (19.6);
(v) adjectives in the Dative (14.4.1.2) and Instrumental (14.3.4.1) that take an argument position;
(vi) adjectives in the Dative that function as temporal adjuncts (15.4.2.1);
(vii) adjectives in the Accusative in a copular complement clause with an omitted copula (20.2.2.4).
Examples are presented in the corresponding sections.

The functions of the cases and case morphemes are the same for adjectives as for nouns (4.2.2). Most adjectives follow the type I declension, and only a few quantificational adjectives (see 6.1.1) belong to type II.

6.1.2.3. Possessive

The Possessive as a grammatical category is typical of nouns. Possessive affixes on adjectives appear under special conditions:

(i) The 3rd person Possessive affix *-ni* is present on the raised attributive modifier (24.2.1.1); such a phrase then formally coincides with a possessive construction (13.1);

(ii) The 3rd person Possessive affix *-ni* may be present on the adjective in the predicative function under certain communicative conditions (24.3.2.1). Normally, the semantics of this construction presupposes a certain emphasis on the adjective and/or a high intensity of the feature named by the adjective, and the Possessive marker is the only means to signal this semantics.

(iii) In copular complement clauses the copula verb may be omitted and then the predicative adjective takes the Accusative case and the possessive affix referring to the subject of the complement clause (20.2.2.4).

Example (266a) illustrates the raised adjective, and example (266b) the predicative adjective with the possessive suffix.

(266) a. *In'ei*   *kuaja-ni*   *xukti-e-ni.*
          dog   fast-3SG   run-PAST-3SG
          'A very fast dog has run.'
      b. *Mäna*   *ge:-ni.*
          flour   bad-3SG
          'The flour is (very) bad.'

Adjectives derived with the suffixes *-ligi* (6.4.1.1.3), *-xi* (6.4.1.2.2), *-fi/-pti* (6.4.1.3.1) and *-mA* (6.4.1.2.1) never take possessive affixes. On discontinuously located attributive adjectives (24.2.1.2) the possessive affixes are absent.

6.1.2.4. Emphatic form

Certain (mostly parametric) adjectives have a special emphatic form marked with *-i*. Although its status and meaning are not entirely clear, it seems to be present when the corresponding adjective is focused and/or its meaning is somewhat intensified. The emphatic form is compatible with adjectives both in the predicative and attributive function, and otherwise the construction remains unchanged. The adjectives that have an emphatic form in *-i* are:

(i) all adjectives derived with the Diminutive suffix *-s'A/-c'A* (6.4.1.1.2), including the quantificational adjective *wac'a* 'little, few' (11.2.1);

(ii) the following adjectives:

(267) *alagdig'a, uligdig'a*   'beautiful'   *koto*   'bald'
       mogz'o   'naked'   *gafa*   'prickly'
       zoŋgo   'naked'   *xekui*   'hot'
       boxo   'hunchbacked' *zas'a*   'light, pliable, cheap'
       p'ala   'black' (SK 742)
       bombolo   'round' (SK 173)

Examples of the use of the emphatic form are given below. In the glosses the emphatic/focus -*i* is represented as FOC, although this might not be completely accurate. When the adjective in the predicative function is followed by the focus particle -*dA*, the emphatic form of the adjectives listed above is strictly obligatory (269).

(268) a. *Nua-ni*   *alagdig'a-i*   *a:nta*   *bi-s'e.*
          he-3SG   beautiful-FOC   woman be-PERF
          'She was a (very) beautiful woman.'

     b. *Ei*   *a:nta*   *alagdig'a-i*   *bi-s'e.*
          this woman beautiful-FOC   be-PERF
          'This woman was (very) beautiful.'

     c. *Čaja*   *xekui:,*   *eke*   *umi-je.*
          Tea   hot.FOC   slow   drink-IMP.2SG
          'The tea is (very) hot, drink it slowly.'

     d. *Bi*   *xekui:*   *čaja-wa*   *umi-kce:-mi.*
          me   hot.FOC   tea-ACC   drink-INT.PAST-1SG
          'I wanted to drink (very) hot tea.'

     e. *B'ata*   *ic'a-i*   *zä:-wa*   *b'a-ni.*
          boy   small-FOC   money-ACC   find.PAST-3SG
          'The boy found a small coin.'

(269) a. *Ei*   *kuŋka*   *mo:-ni*   *nemnes'e-i-de.*
          this cedar   tree-3SG   slender-FOC-FOC
          'This cedar is (very) slender.'

     b. *Lena*   *jä:-ni*   *uligdig'a-i-de.*
          Lena   eye-3SG   beautiful-FOC-FOC
          'Lena's eyes are (very) beautiful.'

     c. *Ei*   *moxo*   *zas'a-i-de.*
          this cup   cheap-FOC-FOC
          'This cup is (very) cheap.'

     d. *Nua-ni*   *ñukte-ni*   *wac'a-i-de.*
          he   hair-3SG   little-FOC-FOC
          'He has little hair.'

Emphatic forms of adjectives do not occur with negation when the adjective corresponds to the finite predicate.

(270)   **Nua-ni*   *alagdig'a-i*   *e-ini*   *bie.*
         he-3SG   beautiful-FOC   NEG-3SG   be.PRES.HAB
         'She is not beautiful.'

6.2. Inflection of compound adjectives

Compound adjectives do not inflect. Plurality may be expressed with the restrictive particle *m'ei* (12.1.1.9.3). The content element always immediately precedes the copula. When compound adjectives are used predicatively the copula must be overtly present in the clause either in the personal form or in the Habitual impersonal form *bie* (see 17.2.2.6 for further detail and examples). In the attributive function the copula corresponds to the Present active participle *bi:* or the Habitual Present Participle *bie*. Such a construction is formally similar to the internal (19.2) or external (19.1) relative clause, cf.:

(271)   a.   *kusige*   *cem-cem*   *bi:-we-ni*
              knife   sharp-sharp   be.PRP-ACC-3SG
              'the sharp knife (ACC)'

        b.   *Nua-ni*   *aju-ini*   *dogbo*   *pou-pou*
              he-3SG   like-3SG   night   dark-dark
              bi:-we-ni.
              be.PRP-ACC-3SG
              'He likes the dark nights.'

        c.   *zugdi*   *ze:-li*   *bi:-we-ni*
              house   middle-ADJ   be.PRP-ACC-3SG
              'middle-sized house (ACC)'

        d.   *Bi*   *ise:-mi*   *tege-we*   *ño:mi*
              me   see.PAST-1SG   gown-ACC   blue
              bi:-we-ni.
              be.PRP-ACC-3SG
              'I saw a blue gown.'

(272)   a.   *Bi*   *b'agdi-mi*   *ze:li*   *bi:*   *zugdi-du.*
              me   live-1SG   middle   be.PRP   house-DAT
              'I live in a middle-sized house.'

        b.   *ŋafu-ñeñe*   *bie*   *guzakta-ni*
              dense-ADJ   be.PRR.HAB   beard-3SG
              'his thick beard'

c.	*Min-du*	*ono*	*bi:*	*dexem*	*ic'a-ŋku*	*sagdä-ŋku*
	me-DAT	how	be.PRP	IND	small-PL	large-PL

ze:-li	*bi:* *moxo*	*bie.*
middle-ADJ	be.PRP mug	be.PRES.HAB

'I have all sorts of mugs–small ones, large ones, and middle-sized ones.'

Note that simple adjectives are also compatible with the copula *bi-*. These cases are referred to as copular relative clauses (19.4).

6.3. General properties of the adjective phrase

6.3.1. Adverbs within the adjective phrase

Adverbial elements within the adjective phrase are the degree adverbs *ketu* 'very', *asi* 'very', *läs(i)* 'very', and some others (10.1.4.1). They always precede the adjective: *ketu ganzinga* 'very clean', *asi seuni:* 'very scary', *läs(i) iŋini* 'very cold'. The restrictive focus particle *m'ei* seems to function as a degree adverb 'very, completely' when it follows certain parametric adjectives (see also 12.1.1.9):

(273) *ge: m'ei* (< 'bad' + *m'ei*)   'very bad, nasty, disgusting'
       ñaŋmu m'ei (< 'clear' + *m'ei*)   'completely clear (of the sky)'

6.3.2. Adjectives that take a second argument

Only a few adjectives may (optionally) take a second argument apart from the subject. They are listed below, together with an indication of the case of the second argument:

(274)

go:	'far'	ABL
das'a	'close'	LAT
xoŋto	'different'	ABL
d'ofo	'identical'	NOM
paki	'skilful'	PART
bubei, bejeku, bu:f(e)i(ni), beptigi	'alike, similar'	NOM

Within the adjective phrase the argument noun phrase normally precedes its head.

(275) a. *Waŋba*   *j'eu-de*   *bui-digi-ni*   *xoŋto.*
       tortoise   what-IND   animal-ABL-3SG   different
       'A tortoise is different from all other animals.'

     b. *Bi* *si*   *in'ei* *bubui-we*   *sa:-mi.*
       me you   dog   similar-ACC   know-1SG
       'I know a dog similar to yours.'

     c. *Bi* *ni:-we*   *ise:-mi*   *ami-mi*   *bubui-we.*
       me man-ACC   see.PAST-1SG father-REF   similar-ACC
       'I saw a man looking like my father.'

     d. *Xai*   *si*   *bu:fi* *b'a*   *bi-s'e-i.*
       again   you   similar find.PP   be-PERF-1SG
       'Again I have found (a girl) looking like you.'

     e. *Nua-ni*   *tege-le*   *paki.*
       he-3SG   gown-PART   skilful
       'She is skilful at (making) gowns.'

6.3.3. Comparative adjective phrase

Comparison is expressed within the adjective phrase only by means of the Ablative noun phrase that corresponds to the standard of comparison. The adjective itself does not take any special comparative morphemes. Since the Ablative noun phrase standard of comparison is always optional and its removal does not affect the grammaticality of the sentence, it is analyzed here as an adverbial element within the adjective phrase. The standard of comparison may precede the adjective (276) or follow it (277).

(276) a. *Ussuri*   *Biki-digi*   *suŋta.*
       Ussuri   Bikin-ABL   deep
       'The Ussuri is deeper than the Bikin.'

     b. *Ei* *ogbö*   *sebie*   *wa:n-digi:*   *sagdi.*
       this elk   earlier   kill.PP-ABL.1SG   big
       'This elk is bigger than the one I killed earlier.'

     c. *Nua-ni*   *ugda-ni*   *si*   *ugda-digi:*   *aja.*
       he-3SG   boat-3SG   you   boat-ABL.2SG   nice
       'His boat is better than yours.'

     d. *Ei* *we:*   *tauxi*   *we:-digi*   *j'eu*
       this mountain   that   mountain-ABL   what
       ba:-la-ni   *gugda.*
       place-LOC-3SG   high
       'This mountain is much higher than that mountain.'

(277) a. *Bi*   *unta-i*   *sagdi-ndima*   *si*   *unta-digi:.*
      me   boots-1SG   big-ADJ   you   boots-ABL.2SG
      'My boots are bigger than yours.'

     b. *Nina*   *diliga*   *Sweta-digi.*
      Nina   stupid   Sveta-ABL
      'Nina is more stupid than Sveta.'

     c. *Bi*   *tege-i*   *imexi-ndima*   *si*   *tege-digi:.*
      me   gown-1SG   new-ADJ   you   gown-ABL.2SG
      'My gown is newer than yours.'

The standard of equative constructions may be expressed by means of the postposition *bede* 'like' (10.2.2.2.3). On equative comparatives see also 6.4.1.1.5.

6.3.4. Expression of measure

A measure in comparative constructions is expressed by the Instrumental noun phrase (278), or – less frequently – by the Nominative noun phrase (279).

(278) a. *Bi*   *sin-digi*   *zube*   *aŋa-zi-ni*
      me   you-ABL   two   year-INST-3SG
      sagdi   *bi-mi.*
      old   be-1SG
      'I am two years older than you.'

     b. *Nua-ni*   *min-digi*   *gugda*   *ila*   *santimetra-zi.*
      he-3SG   me-ABL   tall   three   centimeter-INST
      'He is three centimeters taller than me.'

(279) a. *Bi*   *abuga-i*   *zube*   *neŋi-ni*   *ñondo*
      me   father-1SG   two   day-3SG   early
      eniŋe-digi   *eme:-ni.*
      mother-ABL   come.PAST-3SG
      'My father came two days earlier than my mother.'

     b. *Nua-ni*   *min-digi*   *ila*   *niŋa*   *gugda.*
      he-3SG   me-ABL   three   finger   tall
      'He is three inches taller than me.'

6.3.5. Superlative adjective phrase

Like the comparative degree, the superlative degree is not morphologically marked on the adjective but is expressed analytically by means of the superlative particle *c'o* 'most' that precedes the corresponding adjective.

(280) a.   *Ei   nakta   c'o   bogo.*
        this boar   most fat
        'This boar is the fattest.'

     b.   *c'o   sagdi   b'ata*
        most   big   boy
        'the biggest boy'

     c.   *Nina   c'o   alagdig'a   xatala-digi.*
        Nina   most   beautiful   sister-ABL
        'Nina is the most beautiful of the sisters.'

     d.   *Nua-ni   wo:-ni   zugdi   c'o   uligdig'a.*
        he-3SG   make.PP-3SG house most beautiful
        'The house he made is the most beautiful.'

As demonstrated by (280c), the standard of comparison is marked by the Ablative case.

The high degree of the feature named by a (parametric) adjective may also be expressed by its repetition (cf. expressive repetition of adverbs in 10.1.6).

6.3.6. Adjectives that govern a subordinate clause

The adjectives *maŋga* 'strong at, good at' and *paki* 'skilful at, good at' in the predicative position take a subordinate clause argument. The subordinate clause is expressed by the Present active participle with the personal marker referring to the subordinate clause subject. The latter is coreferential to the subject (the first argument) of the predicative adjective, cf.:

(281) a.   *Kuti   wakca-i-ni   maŋga.*
        tiger   hunt-PRP-3SG   strong
        'The tiger is good at hunting.'

     b.   *Ei   aziga   jexe-i-ni-de   paki*
        this girl   sing-PRP-3SG-FOC skillful
        uli:-ni-de   paki.
        sew.PRP-3SG-FOC   skillful
        'This girl can sing and sew skillfully.'

     c.   *Sin-digi   sigdi   b'a-i-ni   maŋga.*
        you-ABL   angry   get-PRP-3SG strong
        'He is very angry with you.'

     d.   *Ei   ja: ketu ge: m'ei   bi-s'e,*
        this cow   very bad   only   be-PERF
        ni:-we   je-si:-ni   maŋga bi-s'e.
        man-ACC   but-MUL.PRP-3SG   strong be-PERF
        'The cow was very nasty, it butted people a lot.'

6.4. Adjectival derivation

Udihe adjectives are very variable in respect of word formation. Some adjectives have no transparent derivational structure and correspond to the bare stem: *baja* 'rich', *maŋga* 'strong', *sagdi* 'big', *imexi* 'new', *suŋta* 'deep', *igdi* 'loud', *bogo* 'fat' etc. Certain morphologically simple adjectives are borrowed from Chinese: *kuaja* 'fast', *ganziŋa* 'clean'. The majority of adjectives are formed with special derivational affixes. Adjectives are derived by means of suffixes from other morphologically more simple base adjectives (deadjectival derivation, 6.4.1.1), from nouns (denominal derivation, 6.4.1.2), from adverbs (de-adverbial derivation, 6.4.1.3), and rarely from verbs (de-verbal derivation, 6.4.1.4). In the adjectives with several derivational suffixes, suffixes of the deadjectival derivation follow the interclass derivation affixes.

Other means of adjective formation are conversion (6.4.2) and compounding (6.4.3).

6.4.1. Suffixation

Suffixation is a principal means of adjective formation in Udihe. All adjectival suffixes are glossed as ADJ, independent of their meaning, except for the Diminutive suffix (6.4.1.1.1) for which the gloss DIM is accepted.

6.4.1.1. Deadjectival derivation

This section describes the suffixes that attach to the morphologically simpler base adjective. Although, as mentioned in 6.3, the comparative and superlative degree is expressed only analytically and is not reflected in the form of the adjective, there is a large group of affixes of deadjectival derivation that intensify (strengthen) or deintensify (weaken) the meaning of the base adjective.

6.4.1.1.1. The Diminutive suffix *-zig'a*

The Diminutive suffix *-zig'a* typical of nouns (5.1.1.1) is productive with adjectives as well. Structurally, the Diminutive follows the Plural affix: *uligdig'a-ŋku-zig'a* <nice-PL-DIM>. Most frequently the Diminutive co-occurs with parametric adjectives derived with the suffix *-c'A/-s'A* (6.4.1.1.2) where it evokes the appearance of the so-called "emphatic form" ending in *-i* (6.1.2.4), for example: *umac'a-i-zig'a* 'short', *enimac'e-i-zig'a* 'light'.

The Diminutive attached to the adjective renders the meaning 'small, little' with respect to the noun it modifies, or to the subject noun if the adjective is used predicatively. Thus, (282a) and (282b) are synonymous.

(282) a. *Ei   moxo-ziga   uligdig'a-i-de.*
          this cup-DIM   nice-FOC-FOC
          'This little cup is nice.'

     b.   *Ei   moxo   uligdig'a-i-zig'a.*
          this   cup   nice-FOC-DIM
          'This little cup is nice.'

As with nouns, the Diminutive may have an affectionate rather than a purely diminutive meaning:

(283) a. *Käŋa   sike-ziga.*
          deer   young-DIM
          'The deer is young.'

     b.   *Ise-i,   ono-fi*   *kuaŋa   uligdig'a-i-ziga!*
          see-IMP.2SG   how-ADJ   butterfly nice-FOC-DIM
          'Look, what a nice butterfly!'

     c.   *J'eu   mamasa-na-m(i)*   *ŋene-i   ic'ei-zig'a*
          what   wife-DIR-INF   go-2SG   small-DIM
          bi-mie?
          be-INF
          'How are you going to marry being so small?'

6.4.1.1.2. Diminutive adjectives with the suffix -c'A/-s'A

Although these suffixes are not productive, they are present in many words. The suffixes are ultimately related to the nominal Diminutive suffixes -s'A-/-sA- (5.1.2.1). In fact, two variants ending in -c'A and -s'A can often be found for one word (see the examples below). All the adjectives derived with the suffixes in question are parametric and denote a low degree of a measurable feature (remarkably, adjectives that denote a high degree of the same feature do not have any derivational resemblance). Only for some are the base or related words known (284a), while for others they are not present in the modern language (284b).

(284) a. *nepte-s'e/nekte-s'e*   'low'   *nepte-ligi*   'flat'
          nemne-s'e/nemne-c'e   'thin   *nemne-le*   'breadth'
                                     (of round things)'

          uma-c'a   'short' *umac'a-la*   'length'
          da:-s'a   'near' *da:-la*   'near'
          emu-s'e, omo-s'o   'alone, *omo*   'one'
                                     lonely, single'

b.   *enima-s'a, enima-c'a*   'light'
     (ŋ)i-c'a   'small'
     wa-c'a   'few, not numerous'
     lima-s'a   'thin (of voice)'
     lämuge-s'e   'high (of voice)'
     nemuge-s'e   'thin (of flat things)'
     xaŋu-s'e xaŋu-c'e   'shallow'

The suffix *-s'a/-c'a* can be repeated twice within the word *(ŋ)i-c'a* 'small' which strengthens its meaning: *(ŋ)i-c'a-c'a* 'very small'. The adjectives derived with the suffix in question have an emphatic form in *-i* which produces the same effect: *(ŋ)i-c'a-i* 'very small' (see 6.1.2.4).

6.4.1.1.3. Qualificative adjectives with the suffix *-ligi*

This is a regular but unproductive suffix of adjectives derived from the morphologically bound stems that denote colors (285a). Sometimes it also derives adjectives meaning other external features, for example, shape (285b).

(285) a.   *xuta-ligi*   'red'   *xuta-la*   'reddish'
           (of animal's eyes)
           ñö-ligi   'blue, green'   *ñö-lo*   'dark-green'
           c'a-ligi   'white'   *c'a-la*   'pale'
           xo-ligi   'yellow'   *xo-lo*   'yellowish'
           pa-ligi   'black'   *pa-la*   'black'
           xuŋna-ligi   'gray'   *xuŋne-li*   'pale'
           gä-ligi   'blue'   *gä-la*   'bluish'
           zü-ligi   'stripy'   *zü:*   'stripe'
           kede-ligi   'stripy'   *kede-*   'stripe'
      b.   *bombo-ligi*   'ball-shaped'   *bombo*   'ball'
           moŋto-ligi   'round'   *moŋto*   'a round'
           nepte-ligi   'flat'   *nepte-li*   'flat'
           kico-ligi   'with sharp top'   *kico*   'top'
           sembe-ligi   'sparse, flimsy'   *sembe-li*   'sparse, with hollows'
           kokči-ligi   'curly'   *kokčil*   'curly'
           topto-ligi   'spotty'   *topto*   'spot'
           ñä-ligi   'raw'   *ñä:-*   'rot'
           seze-ligi   'shaggy'   *seze-ñoño*   'shaggy'
           kä-ligi   'pale'   *käl-käl*   'pale'
           logzo-ligi   'stooping'   *logzog'oi*   'crooked'
           zoŋgo-ligi   'concave'   cf.*zoŋgo-lo*   'slightly concave'

gikpe-ligi	'glittering'	*kumpu-ligi*	'bulging, prominent'

6.4.1.1.4. Deintensifying suffix -*lA*

The fairly productive suffix -*lA* derives adjectives from adjectives, and expresses the incompleteness of a feature ('a little (too) ...'). The adjectives of color derived with this suffix (286a) are related to adjectives derived with the suffix -*ligi* (6.4.1.1.3), and the bare (underived) stem never occurs independently.

(286) a.

pa-la	'blackish'	*pa-ligi*	'black'
xo-lo	'yellowish'	*xo-ligi*	'yellow'
xula-la	'reddish'	*xula-ligi*	'red'
duŋma-la	'pink'	*duŋma-ligi*	'blue'

b.

sagdi-le	'a little big'	*sagdi*	'big'
gugda-la	'a little high'	*gugda*	'high'
umac'a-la	'a little short'	*umac'a*	'short'
saza-la	'a little foolish'	*saza*	'foolish'
zoŋgo-lo	'slightly concave'	*zoŋgo*	'concave'

Examples:

(287) a. **Xeku** *umac'a-la-da.*
rope short-ADJ-FOC
'The rope is a little too short.'

b. **Bi** *tege-i* *ic'a-la* *ede:-ni.*
me gown-1SG small-ADJ become.PAST-3SG
'My dress got a little too small.'

c. **Ei** *banza* *umac'a-la-da.*
this board short-ADJ-FOC
'This board is a little too short.'

Two following adjectives derived with the suffix -*lA* demonstrate irregular semantics: *sagdi-la* 'very big' and *maŋga-la* 'very strong'.

6.4.1.1.5. Equative adjectives with the suffix -*lAŋki*

This very productive suffix is added to qualitative adjectives. It normally renders an equative meaning in comparison (corresponding to 'as ... as ...'), but it may also simply intensify the meaning of the adjective (corresponding to 'such a ...' or 'so...').

(288) *gugda-laŋki*   'as tall as ..., such a tall'
egdi-laŋki   'as many as ..., so many'
go:- loŋki   'as far as, so far (K 188)'

The derivatives can be used both predicatively and attributively.

(289) a. *Ei*   *mo:*   *xaisi*   *gugda-laŋki-ni*   *tauxi*
This   tree   also   high-ADJ-3SG   that
mo:-digi.
tree-ABL
'This tree is as high as that one.'

b. *I:-le*   *gene-se-i*   *si*   *ei*   *egdi-laŋki*
what-LOC   find-EXP-2SG   you   this   many-ADJ
činda-wa?
birds-ACC
'Where have you found so many birds?'

c. *Ei*   *paki-laŋli*   *a:nta-wa*   *ŋeni-wene:-i*   *bebu.*
this skillful-ADJ   woman-ACC   go-CAUS.PAST-2SG   EV
'You have let this skillful woman go!' (SK 742)

6.4.1.1.6. Intensifying adjectives with the suffix *-wAlA*

The productive suffix *-wAlA* strengthens qualitative features. It does not co-occur with the intensifying adverbs *lä(si)*, *asi* 'very' which may otherwise be present within the adjective phrase, and seems synonymous with them. Unlike the intensifying suffix *-ndima* (6.4.1.1.7) it is not restrictive and is not used in comparative constructions. Adjectives derived with the suffix *-wAlA* can co-occur with the superlative particle *c'o* 'most' (290a) but this is by no means obligatory in this case.

(290) a. *Ei*   *c'o*   *nemnes'e-wele xeku.*
this most   thin-ADJ   rope
'This is the thinnest rope.'

b. *Bi*   *emei-wele*   *suese-we-i*   *i:-le*
me   sharp-ADJ   axe-ACC-1SG   what-LOC
nede:-i?
put.PAST-1SG
'Where have you put my (very) sharp axe?'

c. *Uligdig'a-wala*   *tege-we*   *teti-je!*
nice-ADJ   gown-ACC   dress-IMP.2SG
'Put on a very nice gown.'

d. *Wanimi-wele*   *xeku-we*   *zawa-ja.*
    long-ADJ   rope-ACC   take-IMP.2SG
    'Take a (very) long rope.'

e. *sagdi-wala anda*
    big-ADJ   musk.deer
    'the most important musk-deer' (SKX 78)

6.4.1.1.7. Intensifying adjectives with the suffix *-ndima*

The suffix *-ndima* (Northern *–dima*) does not have any harmonic variants (3.5.1.2). It marks a high degree of a feature or marks the absolute degree of comparison used without an overtly expressed standard of comparison. The suffix is productive; it attaches to any qualitative adjective (except compound adjectives), and is subject only to semantic constraints.

(291) a. *Ei   ule: pei-ni   sagdi-ndima.*
          this meat   piece-3SG   big-ADJ
          'This piece of meat is bigger (than the other).'

      b. *Biki   bäsa-ni   eŋme-ndima   Xu: bäsa-digi-ni.*
          Bikin   river-3SG   wide-ADJ   Khor river-ABL-3SG
          'The river Bikin is wider than the river Khor.'

      c. *Ei   moxo   muj'ei-ndima-wa   zawa-ja.*
          this cup   whole-ADJ-ACC   take-IMP.2SG
          'Take this whole (unbroken) cup.'

      d. *Bi   tege-we   ise:-mi   bi*
          me   gown-ACC   see.PAST-1SG   me
          tege-digi:-de   *uligdig'a-ndima-wa.*
          gown.1SG-ABL-PART   nice-ADJ-ACC
          'I have seen a gown nicer than mine.'

      e. *Si   sine-i   ugei-ndima,   bi sine-i   enimac'a.*
          you sack   heavy-ADJ   me sack-1SG light
          'Your sack is heavier, my sack is light.'

Although adjectives with the suffix *-ndima* can be used in the comparative adjective phrase (see (291b) and (291d) above), they are not obligatory in this function.

Nouns that have a parametric component in their meaning take the affix *-ndima*, which converts them to qualitative adjectives.

(292) *'ai-ndima*   'the elder (brother)'   *'ai*   'elder brother'
       neŋu-ndima   'the younger   *neŋu*   'younger sibling'
                         (sibling)'

exi-ndima	'the elder (sister)'	*exi*	'elder sister'
wala-ndima	'the luckier (hunter)'	*wala*	'lucky hunter'

For example:

(293) a. *neŋu-ndima*   *aziga*
         younger.sibling-ADJ   girl
         'the younger sister'

      b. *Min-digi*   *'ai-ndima*   *bi:-ni.*
         me-ABL   elder.brother-ADJ   be-3SG
         'My brother is older than I am.'

6.4.1.2. Denominal derivation

6.4.1.2.1. Relative adjectives with the suffix *-mA*

This is a common and very productive Tungus-Manchu suffix that derives denominal relative adjectives. It has a wide array of meanings.

(i) In most cases the derived adjectives denote material:

(294)

mo:-mo	'wooden'	*mo:*	'wood'
sugbu-me	'made of fish skin'	*sugbu*	'fish skin'
wokto-mo	'made of grass'	*wokto*	'grass'
iŋakta-ma	'wool(en)'	*iŋakta*	'wool'
meŋmu-me	'silver'	*meŋmu*	'silver'
aisi-me	'gold(en)'	*aisi*	'gold'
ña:-ma	'leather(n)'	*ña:*	'leather'
kirpiči-me	'made of bricks'	*kirpiči*	'brick'
seule-me	'made of silk'	*seule*	'silk'
tuza-ma	'made of lead'	*tuza*	'lead'

Although this pattern is very frequent, it is not universal, for example, not all the nouns denoting kinds of trees allow it, cf.

(295)

talu mo:-ni	'birch'	*talu-ma*	'made of birch bark'
aikta mo:-ni	'fir-tree'	*aikta-ma*	'made of a fir-tree'
kuŋka mo:-ni	'cedar'	**kuŋka-ma*	'made of cedar'

The meaning 'made of cedar' is expressed periphrastically:

(296) *Teŋku-we*   *kuŋka*   *mo:-zi-ni*   *wo-so.*
      stool-ACC   cedar   tree-INST-3SG   make-PP.PAS
      'The stool is made of cedar.'

(ii) Some adjectives derived from base nouns denoting things or animals express the belonging to a certain class:

(297)	*g'ai-ma anda*	'the crow-friend'
	kuliga-ma sita	'snake-son'
	joxoso-mo au	'a cap made of a kettle, kettle-cap'
	xojo-mo nä:	'bulltrout skin' (K 145)
	sul'ai-ma atiga:	'fox-wife' (Schneider 1937: 88)
	mafa-ma mafa-ni	'her bear-husband' (SK 547)
	sama-ma tege	'shaman gown'
	ñoŋo-mo suala	'ski made with glue'
	teuze-me zugdi	'winter house' (SKX 88)
		<winter.house-ADJ house>

Nouns denoting nationality also follow this pattern. Adjectives derived from them denote features more abstract than those denoted by the corresponding possessive construction, cf. examples (298a) and (298b).

(298)	a.	*udie-me tege*	'a gown in Udihe cut (fashion)'
		lusa-ma anda	'a Russian friend (by nationality)'
		udie-me anda	'a Udihe friend'
	b.	*udie tege-ni*	'a real Udihe gown, a gown of a Udihe'
		lusa keje-ni	'Russian language (language of the Russians)'
		udie anda-ni	'a friend of a Udihe'

(iii) Since kinship terms do not distinguish the gender of certain (usually younger) relatives (*neŋu* 'younger sibling', *sita* 'child; son or daughter'), this meaning is rendered by means of adjectives with the suffix –*mA*.

(299)	*b'ata-ma*	'male (about a younger relative or a doll)'
	aziga-ma	'female (about a younger relative or a doll)'
	a:nta-ma	'female (about an adult relative)'
	ninta-ma	'male (about an adult relative)'

Cf. also:

(300)	*b'ata-ma sita*	'son'	<boy-ADJ child>
	guas'a-ma in'ei	'bitch'	<bitch-ADJ dog>

(iv) On rare occasions the suffix –*mA* is used to strengthen a feature, but this usage is not productive:

(301)	*aja-la-ma*	'the best' (K 204)
	gugda-ma	'very high, enormous'

(v) Adjectives derived with the suffix *-mA* may express the meaning 'resembling X, looking like X', for example:

(302) a. *miki-me   kuliga*
      adder-ADJ   snake
      'a snake resembling an adder'

b. *ñoligi-me   jä: ñoli,   euge-me   ŋala*
    bead-ADJ   eye   green   pincers-ADJ   arm
    käu-käu,   *käfakta-ma*   *uña*   *käf- käf,*
    squeak-squeak   vice-ADJ   finger   crackle-crackle
    silou-me   *begdi*   *ceŋceli, ku:ge-me*
    roasting.spit-ADJ   leg   long   bellows-ADJ
    emugde   *pukceli.*
    belly   swollen
    'The eyes are green like (green) beads, the arms squeak like pincers, the fingers crackle like a vice, the legs are long like roasting spits, the belly is swollen like (a pair of) bellows' (K 104)

c. *mäna-ma   zaka*
    flour-ADJ   new.snow
    'new snow like flour'

d. *oñokto-mo   sata*
    sand-ADJ   sugar
    'granulated sugar'

Cf. also *c'a-ma* 'white (of hair)' and *c'a-ligi* 'white'.

A base noun within an adjective derived with the suffix *-mA* may sometimes act as the head of its own phrase.

(303) a. *Bi   uli-e-mi*   *niŋka   seule-me*   *tege-we.*
    me   sew-PAST-1SG   Chinese silk-ADJ   gown-ACC
    'I have made a gown of Chinese silk.'

b. *Gaŋa   sele-me   tada-zi   gakpa:-ni.*
    hard   iron-ADJ   arrow-INST   shoot.PAST-3SG
    'He shot with a steel arrow.' (SK 232)

However, periphrastic constructions are typically preferred in this case, such as, for example, the relative clause.

(304) *Bi gada:-mi*   *kusige-we   aja   gaŋa-zi*
    me buy.PAST-1SG   knife-ACC   good   steel-INST
    wo-so-wo.
    make-PP.PAS-ACC
    'I have bought a knife made of good steel.'

6.4.1.2.2. Proprietive adjectives with the suffix *-xi*

The suffix *-xi* derives denominal adjectives, normally with a proprietive meaning. As discussed in 4.3.1, the same suffix derives the Proprietive forms of nouns, which also has some adjectival properties but demonstrates a lesser degree of adjectivization. As distinct from the Proprietive forms of nouns, in the proprietive adjectives the original meaning of possession is typically preserved only metaphorically, and the adjective simply denotes certain abstract features.

(305)	*meje-xi*	'clever'	*meje*	'mind'
	kui-xi	'strong'	*kui*	'strength'
	xu-xi	'rotten'	*xu:*	'smell'
	unugu-xi	'ill'	*unugu*	'illness'
	amta-xi	'tasty'	*amta*	'taste'
	zuge-xi	'on business'	*zuge*	'business'
	eke-xi	'idle'	*eke*	'(spare) time'
	kesi-xi	'lucky'	*kesi*	'luck'
	saŋa-xi	'with holes'	*saŋa*	'hole'
	gebu-xi	'honored'	*gebu*	'honor'

As distinct from the Proprietive form of nouns, proprietive adjectives behave completely like other qualificative adjectives: they may be modified by degree adverbs (6.3.1), take the Plural suffix *-ŋku*, and participate in comparative and superlative constructions. Further, these two types of forms are negated in different ways: the Proprietive forms of nouns are negated by means of the Partitive negative construction (23.2.1.5.4); while the proprietive adjectives are negated with the negative verb *e-* and the Habitual copula *bie* (23.2.1.5.3).

The nominal Proprietive forms are here glossed as PROP, while proprietive adjectives are glossed as ADJ (derived adjectives), although the border between the two is obviously not always clear-cut.

6.1.4.2.3. Adjectives with the suffix *-(n'A)u(se)*

The suffix in question has several phonetic variants illustrated below. Its general meaning is 'rich in'; i.e. it expresses to a large extent the possession of an object expressed by the base word. In this function it is fairly productive.

(306) a.	*zolo-n'ouse*	'stony'	*zolo*	'stone'
	kada-n'ause	'rocky'	*kada*	'rock'
	sua-n'ause	'teeming with fleas'	*sua*	'flea'
	kumuge-n'euse	'teeming with lice'	*kumuge*	'louse'
	koto-n'ouse	'scabby, mangy'	*koto*	'bald'

	ikte-n'euse	'with large teeth'	*ikte*	'tooth'
b.	*oñokto-use*	'sandy'	*oñokto*	'sand'
c.	*amba-n'au*	'hellish'	*amba*	'evil spirit'
	ogzo-n'ou	'hellish'	*ogzo*	'evil spirit'
	ugbe-n'eu	'with shoals' (SK 165)	*ugbe*	'shoal'

Some words derived with the suffix in question denote a negative or unusual feature (for example, an unusual appearance), cf. the homonymous suffix employed in the deverbal derivation (6.4.1.4.1).

(307)	*jagdugu-n'euse*	'wearing spectacles'	*jagdugu*	'spectacles'
	guakta-n'ause	'with a beard'	*guakta*	'beard'
	unugu-n'ause	'sickly'	*unugu*	'sickness'
	lawa-n'ause	'failing'	*lawa*	'failure'
	pöŋgo-n'ouse	'with pits'	*pöŋgo*	'pit'
	ami-kt'a-use	'sleepy headed'	*amai*	'sleepy'
	kakt'a-use	'with a harelip'	*kakta*	'a half'

Examples are:

(308)	*ogzo-n'ou ba:*	'a hellish place'
	we: kada-n'ausa-ni	'rocky hill'
	wokto-n'ousa biga	'grassy clearing'
	kada-n'ausa we:	'rocky hill'
	on'okt'o-usa bugasa	'sandy island'
	zolo-n'ousa bugasa	'stony island'
	jata-n'ou ikte-ni	'baby tooth' cf. *jata-si-* 'give birth'

6.4.1.3. De-adverbial derivation.

6.4.1.3.1. Temporal adjectives with the suffix *-fi/-pti*

This suffix forms a closed class of adjectives from adverbs that mostly have a temporal (including a calendar) meaning.

(309)	*eine-fi*	'today's'	*eineŋi*	'today'
	timana-fi	'tomorrow's'	*timana*	'tomorrow'
	tine-fi	'yesterday's'	*tine-neŋi*	'yesterday'
	neki-fi	'spring's'	*neki*	'spring'
	ali-fi	'from when'	*ali*	'when'
	zulie-fi	'former'	*zulie*	'in front'
	tama-fi	'last year's'	*tamati*	'yesterday'

bolo-i-fi	'autumn's'	*bolo*	'autumn'
ana-fi	'former, ancient'	*anana*	'before, in the past'

Three more adjectives derived according to this pattern have a non-temporal meaning.

(310)	*ono-fi*	'what kind'	*ono*	'how'
	utebe-fi	'such'	*utebe*	'so'
	bu:-fi	'resembling'	cf. *bubu*	EV

The variant of the suffix in question, *-pti~-kti*, is only attested for some words, where it freely alternates with *-fi* (311). It is characteristic of the Northern dialect (Sunik 1968: 219) and seems to have a Nanai or Ulcha origin (cf. the Ulcha suffix *-pti* and the Nanai *-pči* with the same meaning).

(311)	*ana-pti ~ ana-kti ~ ana-fi*	'former, ancient'
	tine-pti ~ tine-kti ~ tine-fi	'yesterday's'

6.4.1.3.2. Locational adjectives with the suffix –*(u)xe*

This suffix derives a closed class of adjectives from adverbial stems with a spatial meaning.

(312)	*amä-uxe*	'the last'	*amä*	'back'
	a-uxe	'located here'	*a-uxi*	'here (LAT)'
	xegie-uxe	'low'	*xegie-ni*	'bottom'
	do-uxe	'inner'	*do:-ni*	'inner side'
	ezie-uxe	'downstream'	*ezi-nu*	'downstream'
	ño:-xo, *ño-uxe*	'first, forward'	*ño:-i-*	'go forward'
	ojo-uxe	'located on the surface'	*ojo-ni*	'surface'
	zule-uxe	'first'	*zulie-du*	'in front (DAT)'
	solo-uxe	'upper (up the stream)'	*solo-zo*	'upper side'
	uje-uxe	'upper'	*uje-ze*	'top, upper side'
	wei-xe	'upper' (SKX 324)	*we-ixi*	'on the surface (LAT)'
	bagä-uxe	'located on the opposite side'	*bagä*	'the opposite side'
	die-uxe	'far from the river bank'	*ie-ze*	'place far from the bank'

6.4.1.4. Deverbal derivation

The deverbal adjective derivation is atypical and non-productive: there are only a few examples.

6.4.1.4.1. Adjectives with the suffix -(n'A)use

The suffix in question forms denominal (6.4.1.2.3) and deverbal adjectives expressing personal qualities that are negative or deviate from the "norm". The derived adjectives usually have witty or condescending connotations. They are often substantivized. The suffix has several phonological variants: -n'Ause, '-use, -use.

(313)	soŋo-n'ouse	'whining'	soŋo-	'cry'
	sokto-n'ouse	'heavy drinking'	sokto-	'get drunk'
	sulä-n'ause	'cunning'	sulä-	'dodge'
	zomi-n'euse	'being a thief'	zomi-	'steal'
	cemne-n'euse	'gossipy'	cemne-	'gossip'
	oŋmo-n'ouse	'forgetful'	oŋmo-	'forget'
	xeŋme-n'euse	'eating greedily'	xeŋme-	'eat greedily'

For the following words the corresponding suffix has the form (')-use with the laryngealization of the stem-final non-high vowel.

(314)	gänd'a-use	'lazy, idle'	gända-	'be lazy'
	ŋel'e-use	'cowardly'	ŋele-	'be afraid'
	zomi-use	'being thief'	zomi-	'steal'
	mud'a-use	'separated (spouse)'	muda-	'pass, finish'

Examples of noun phrases where the adjective is prenominal and postnominal are:

(315)	a.	gänd'a-use in'ei	'a lazy dog' <lazy-ADJ dog>
	b.	in'ei gänd'a-use-ni	'a lazy dog' <dog lazy-ADJ-3SG>

6.4.1.4.2. Adjectives with the suffix -mA

A frequent adjectival suffix -mA (6.4.1.2.1) seems able to derive certain adjectives from verbs.

(316)	xuili-me	'boiling'	xui-	'boil'
	zegdeli-me	'burning' (K 180)	zegde-	'burn'

kuai-ma   'log (Adjective)'   *kua-*   'cut, make a frame'

6.4.1.5. Rare adjectival suffixes

In this section we list the suffixes of adjectival derivation that are only represented by a few examples:

-mu:i

sigdi-mu:i 'angry' (cf. *sigdi b'a-* 'to be angry'), *kogo-mu:i* 'thirsty', *a-mu:i* 'sleepy' (cf. the Desiderative verbal affix *-mu:i-* (8.2.3.1)), *sata-mu:i* 'sweet' (*sata* 'sugar'), *s'ai-mu:i* 'salty' (*s'ai* 'salt');

-gdig'a

uli-gdig'a, ala-gdig'a 'nice, beautiful' (cf. Nanai *ule:n* 'nice');

-ktA

sagdi-kte 'enormous' (*sagdi* 'big, old'), *aja-kta* 'very nice, the nicest' (*aya* 'good, nice'), *eje-kte* 'fast-flowing' (of the river)' (cf. *eje-* 'flow');

-(')Au, -u

sagd-'au 'old (of animals, trees)', for example: *sagd-'au soŋgo* 'old bear' (*sagdi* 'big, old'), *käba-u* 'narrow (of a place)' (cf. *käba-si-* 'throttle, strangle'), *bogis-'ou* 'terrorized' (*bogisi-* 'terrorize');

-ŋtu

kakca-ŋtu 'orange, brown' (cf. *kakca-mpa(ma)* 'orange, brown');

-mpA(mA)

kakca-mpa(ma) 'orange, brown' (cf. *kakca-ŋtu* 'orange, brown');

-mi

wani-mi 'long' (cf. *wani-la-ni* 'length'), *dä-mi* 'thick' (cf. *dä-la-ni* 'thickness'); the adjectives formed with this suffix take the Plural marker *-ŋku* with the change of the final vowel into /ä/ (see 6.1.2.1.1);

-xiktu

degbe-xiktu 'wet' (*degbe-* 'get wet'), *saŋa-xiktu* 'holey' (*saŋa* 'hole'); apparently the suffix *-xiktu* is a compound and consists of the adjectival affix *-xi* (6.4.1.2.2) and the marker of the Resultative Participles *-ktu* (7.5.1.4);

-i:/-i (*-ihi* in Schneider 1936 and Kormušin 1998)

sagdi 'big' (cf. *sagda-ŋi-* 'get old'), *xaŋkani:* 'stuffy' (cf. *xaŋka-* 'suffocate'), *bubu-i* 'similar' (cf.*bubu* 'like');

-ti

omo-ti 'same, similar' (cf. *omo* 'one'), *amä:-ti* 'last' (*amä:-* 'behind, back') (SK 101);

-mti

gugda-mti 'very high' (*gugda* 'high'); *zulie-mti* 'front, fore-' (cf. *zulie-ni* 'in front of' (cf. the homonymous suffix on nouns which may be the result of substantivation of adjectives in 5.1.3.1.5);

-ptigi

kumte-ptigi 'turned upside down' (cf. *kumte-* 'turn over'), *be-ptigi* 'similar' (cf. *bede* 'like');

6.4.2. Zero-derivation

Typical cases of conversion (adjectivization) are participle-to-adjective conversion and noun-to-adjective conversion.

6.4.2.1. Participle-to-adjective conversion

6.4.2.1.1. Resultative Participles

Certain Resultative Participles derived with the suffix *-ktu* (7.5.1.4) are adjectivized. As distinct from the base participle, the resulting adjective can be modified by degree adverbials (for example, *c'o* 'most', *belem* 'even more') and head a comparative adjective phrase. Adjectives derived through conversion are:

(317) *koŋo-ktu* 'lean, thin'   *ŋele-ktu* 'fearful, timid'
      ña-ktu 'rotten'   *sokto-ktu* 'drunk'
      soŋo-ktu 'crying, whining'

Examples:

(318) a. *Bi soŋo-ktu sita-i*   *susa:-ni.*
         me whine-RES son-1SG   escape.PAST-3SG
         'My whining son ran away.'

     b. *Ei ni:*   *koŋo-ktu,*   *gagda*   *ni:*
         this man   thin-RES   another   man
         belem   *koŋo-ktu.*
         even   thin-RES
         'This man is thin, that other man is even thinner.'

6.4.2.1.2. Active participles

Certain adjectives seem to result from the historical conversion of Present active participles in *-i* (7.5.1.1.1).

(319) *xeku-i*   'hot'   cf. *xeku-si-*   'warm oneself'
      ñama-i   'warm'   cf. *ñama-si-*   'warm'
      su:le-i   'ill'   cf. *su:le-*   'be ill'

6.4.2.2. Noun-to-adjective conversion

Adjectives with the suffix *-(gdu)gu* are the result of the adjectivization of nouns derived with the nominal suffixes *-gdugu*, *-gdigA* (5.1.2.10) and *-(u)gu* (5.1.2.8).

(320) *ñä-gdugu*   'stinking'   *ñä-*   'to rot'
        ŋele-gdugu   'timid, fearful'   *ŋele-*   'to fear'
        ñuktu-gu   'moist'   *ñuktu-*   'get wet'

Besides, nouns derived from other nouns and verbs by means of the suffix *-ŋku*, *-ŋkA* (5.1.1.4) can also undergo adjectivization.

(321) *diga-ŋku*   'greedy'   *diga-*   'eat'
        sulä-ŋku   'clumsy'   *sule-*   'be ill'
        degde-ŋku   'jolly'   *degde-*   'rise'
        egde-ŋke   'strange, sly'   *egde-*   'wonder'
        sebze-ŋke   'interesting, jolly' *sebu-*   'wonder'
        ño:- ŋku   'first'   *ño-*   'be in front'
        ŋelie-ŋku   'timid' (SK 674)   *ŋelie-*   'be afraid'

6.4.2.3. Infinitive-to-adjective conversion

At least one adjective is derived through conversion from the Desiderative Infinitive in *-mugdi* (7.5.6.2):

(322) *(i)ñe-mugdi*   'funny'   *iñe-*   'laugh'

The example below illustrates this adjective in the attributive function.

(323) *Imasi-je*   *min-du*   *imaŋku*   *ñemugdi-we-ni.*
        tell-IMP.2SG   me-DAT   tale   funny-ACC-3SG
        'Tell me a funny tale.'

6.4.3. Compounding

Compounds are transitional in character between a syntactic phrase and a lexical element. There are two major types of compound adjectives in Udihe: compounds with semantically light adjectives, and compounds with the copula.

6.4.3.1. Compounds with semantically light adjectives

Compounds of this type are stable lexicalized expressions that consist of a noun (sometimes in a possessive form) and semantically light (quantifying) adjectives. The following adjectives participate in such a compound: *maŋga* 'strong, very much', *zas'a* 'light', *egdi* 'many'.

(324)

zä:(-ni) maŋga	'expensive'	*zä:*	'money'
zä:(-ni) zas'a	'cheap'		
tama(-ni) zas'a	'cheap'	*tama*	'price'
kui(-ni) maŋga	'strong'	*kui*	'strength'
egdeŋke maŋga	'cunning'	*egdeŋke*	'cunning'
mäwa(-ni) maŋga	'angry' (K 260)	*mäwa*	'heart'
meje egdi	'clever, intelligent'	*meje*	'mind'
meje(-ni) ge:	'angry' (SK 87)		
meje(-ni) mejeku	'stubborn' (SK 252)		

Within the compound the noun must precede the adjective, which behaves morphologically and syntactically like a regular simple adjective, cf.:

(325) a.   *Ei tege zä:-ni maŋga-la-da.*
        this gown   money-3SG   strong-ADJ-FOC
        'This gown is very expensive.'

     b.   *Ei tege zas'a, ta-uxi   tege zä:-ni*
        this gown   cheap   that-LAT   gown   money-3SG
        maŋga bi-s'e.
        strong   be-PERF
        'This gown is cheap, that gown was expensive.'

     c.   *Si kui   ketu maŋga, bi   sin-digi*
        you strength.2SG   very   strong   me   you-ABL
        kui   egdi bi-mi.
        strength   much   be-1SG
        'You are very strong, (but) I am stronger than you.'

     d.   *Nua-ni   meje-ni egdi.*
        he-3SG   mind-3SG much
        'He is clever.'

In the following examples the adjective *egdi* precedes the noun.

(326) a.   *seuni: egdi   tama-ni   tege-ni*
        scary   much   price-3SG   gown-3SG
        'a very expensive gown' (SK 861)

b. *wac'a*   *tama*
    little   price
    'cheap' (SK 861)

6.4.4.2. Copular compounds

As mentioned above, copular compounds consist of a content element and the copula verb *bi-* 'be' (sometimes also *ede-* 'become') in the corresponding form. The content element may be: (i) certain simple adverbs (6.4.4.2.1); (ii) bound adjectives derived with certain suffixes (6.4.4.2.2); or (iii) ideophonic adverbs (6.4.4.2.3). The content element within the copular compounds is morphologically unchangeable. It does not take a Plural, case, or possessive marker, and cannot be separated from the copula by other words. However, some of them can undergo raising and be used without a copula after the head nominal (24.2.1.1.3).

6.4.4.2.1. Copular compounds with adverbs

The following are compound adjectives that include a simple adverb as the first component:

(327)   *bei bi-*   'simple'   *bei*   'in vain'
        ono bi-   'what kind'   *ono*   'how'
        täsi bi-   'full'   *täsi*   'very, much'
        do: bi-   'close (of relatives)'   *do:-*   'inside'
        tue bi-   'winter (of a skin)'   *tue*   '(in) winter'
        zua bi-   'summer (of a skin)'   *zua*   '(in) summer'

Cf. also *ute bi-* 'such' (*ute* 'that') and *dulaŋki-le bi-* 'middle (among siblings)' (SK 66).

6.4.4.2.2. Copular compounds with derived adjectives

Adjectives derived with the suffixes *-li* and *-ñAñA(ñA)* are not used independently and occur only within copular compounds.

(i) The suffix *–li* (sometimes also *-lʲ*) is synonymous to *-ligi* (6.4.1.1.3), but is less frequent. It derives the following adjectives found within the copular compounds.

(328)   *pa-li*   'black'   cf. *pa-m*   'black'
        nepte-li   'flat'   *nepte*   'flat'
        xuŋne-li   'pale'

kokčiľ	'curly'	cf. *kokči-ligi*	'curly'
sembe-li	'with holes, sparse'	cf. *sembedeu*	'with holes'
seze-li	'shaggy'	cf. *seze-m*	'shaggy'
ze:-li	'middle (sized)'	cf. *ze:*	'middle'
egdeŋe-li	'cunning'	*egdeŋe*	'interesting, strange'

(ii) The suffix *-ñAñA(ñA)* has the following variants: *-ñeñe, -ñaña* (often pronounced as *-ñäñä*), *-ñoño* (often pronounced as *-ñöñö*), and *-ñeñeñe* (the most emphatic variant). The distribution of these variants basically depends on vowel harmony (3.3). However, the variant *-ñoño* seems to have been generalized and can replace other variants conditioned by the harmony. This suffix is an example of partial reduplication, and is very expressive (like most reduplications). It describes a situation when certain external features of an object are present to a great degree. It can be added to practically all stems denoting colors (329b) and in this sense it is productive.

(329) a.

kede-ñeñe	'(very) stripy'	*kede-ligi*	'stripy'
bakči-ñoño	'(very) wrinkled'	*bakča-m*	'wrinkled'
logbo-ñoño	'(very) thick (of fur)'	*logbo-logbo*	'shaggy'
seze-ñeñe	'shaggy'	*seze-m*	'shaggy'
kölo-ñoño	'trodden'	*kölo-kölo*	'very smooth'
igbe-ñeñe-	'soft'	cf. *igbe-ne-*	'soften a skin'
ŋafu-ñeñe	'dense, thick'	*ŋafu- ŋafu*	'bearded'
čili-ñeñe	'smooth, flat (of a road)'		

b.

xo-ñoño	'bright yellow'	*xo-lo*	'yellowish'
c'a-ñoño	'dazzling white'	*ca-ligi*	'white'
xuta-ñoño	'bright red'	*xuta-ligi*	'red'
pa-ñoño	'absolutely black'	*pa-ligi*	'black'
duŋma-ñaña	'pink'	*duŋma-la*	'pink'
kökto-ñoño	'raven-black'		

The suffix *-ñAñAñA* is an expressive variant of *-ñAñA* with the reduplication of the last syllable. Some examples are:

(330) a.

Odo	*dili-ni*	*tala-ñAñAñA*	*bie.*
grandfather	head-3SG	bald-ADJ	be.PRES.HAB

'Grandfather's head is (completely) bald.' (SK 857)

b.

Bua	*kiau-ñañaña.*
place	clear-ADJ

'The sky is very clear.' (SK 179)

6.4.3.2.3. Copular compounds with ideophonic adverbs

On the derivation and semantics of ideophones see 10.1.3.2; a list is given in Chapter 26. Ideophones mostly function as verbal modifiers (10.1.3.2.3) and as predicates (17.2.2.6). In the attributive function they are very rare, although not impossible. Attributive ideophones either behave as a compound adjective, that is, are accompanied by the copula verb (331), or as a single adjective (332). In the latter case they do not undergo raising and do not take the Plural inflection.

(331) a. *ŋene-i,* *ŋene-i, ŋene-i,* *omo* *pöloi*
   go-PRP go-PRP go-PRP one trodden
   bi: *xokto-wo* *b'a-ni*   *sikie.*
   be.PRP road-ACC find.PAST-3SG   evening
   '(She) went (by and by) and in the evening she found a trodden path.'

 b. *Logbo-logbo* *osi-gi-e-ni*
   bent-bent   become-REP-PAST-3SG
   mamaka-la *iŋ-ki-ni.*
   old.woman-LOC enter-PAST-3SG
   'He came to a very bent old woman.' (SKX 150)

 c. *Sagdi* *ag'a-ti*   *teluŋu-si-li-e-ni*
   big   elder.brother-3PL story-V-INC-PAST-3SG
   čiŋdem *bih*   *mamaka*
   thin.waisted be.PRP   old.woman
   xuli-se:-me-ni.
   walk-EXP.PP-ACC-3SG
   'The oldest brother started telling that an old woman with a very thin waist had come.' (SK 1012)

(332) a. *čif-čif* *tege*
   wet-wet gown
   'a gown that is wet through'

 b. *Bi* *se:-mi*   *we:* *kei-kei-we-ni.*
   me ee.PAST-1SG hill steep-steep-ACC-3SG
   'I saw a very steep hill.'

 c. *bakčam* *anta*
   wrinkled.faced woman
   'a woman with a wrinkled face'

 d. *Zuke* *zuke* *kei-kei* *wo:-tigi*
   hardly hardly steep-steep mountain-LAT
   tukti-e-mi.
   climb-PAST-1SG
   'I barely climbed the steep mountain.'

e. *čik-čik*   *bo:lo-n(i)*   *di:ŋki-ni*
   tiny-tiny   bird-3SG   size-3SG
   'as large as a small bird'

f. *waŋter-waŋter*   *bugdi-ni*
   bow.legged-bow.legged   leg-3SG
   'his bow legs'

g. *Kiai-kiai*   *sigbo-lo*   *tukti-e-ti.*
   steep-steep   cape   climb-PAST-3PL
   'They climbed a very steep cape.' (SKX 326)

Chapter 7
Verbal morphology

This chapter deals with the inflectional and derivational categories of the verb. The inflectional verb forms are divided into finite and non-finite forms. The former may express independent predication, whereas the latter are only found in an embedded clause. Formally, both finite and non-finite forms may be either analytic or synthetic. The synthetic forms are derived by adding a suffix to one of the verbal stems. The analytic forms include a content verb and a copula element (normally the auxiliary verb *bi-* 'be'), and both of these are inflected in some way.

Udihe verbs oppose the Indicative and the five non-Indicative moods. Indicative forms express a further aspectual opposition of the General, Habitual, and Progressive aspects, for each of which several temporal categories exist. Inflectional forms are marked for subject agreement (15.1.1.2) and distinguish between two numbers (Singular and Plural) and three persons (1st, 2nd, and 3rd). Exclusive and inclusive forms are distinguished for the 1st person Plural. Non-finite verbal forms comprise participles, converbs, and infinitives. The synthetic finite forms are built according to the following morphological pattern:

(333) stem – (derivational affixes, valence changing affixes) – tense/mood – person/number

In some forms the plural affix precedes the tense/mood marker (7.2).

All inflectional verbal forms are negated by means of the negative auxiliary verb *e-*, which takes a particular inflectional form, and is followed by the content verb. The normal word order is for the copula 'be' in the analytic forms to follow the content verb; however, the negative auxiliary usually precedes it.

Sections 7.1–7.5 describe the formal aspects of verbal inflection: the types of verbal stem and inflections, and the formation of particular inflectional categories, both finite and non-finite. In section 7.6 we present paradigms illustrating verbal inflectional morphology. Sections 7.7–7.10 deal with the functions of the verbal inflectional categories.

7.1. Verbal stems

Verbs belong to one of the two major morphonological groups, class I and class II. Class I verbs have a vowel-final root, whereas the root of class II verbs is consonant-final (normally ending in *-n*). The majority of verbs belong to class I.

All verbal synthetic forms are derived from one of three stems: the Present stem, the Past stem, or the Perfect stem, the formation of which differs for class I and class II verbs. The Present stem is the bare form, and coincides with the verbal root. The other two stems have a morphologically more complex form, and were historically derived from the Present stem (the verbal root). The Past stem added the suffix *-sa-* (> Udihe *hA*), the Perfect stem the suffix *-ka-* (> Udihe *'A*). In the modern language the derivational relations are not clearly apparent because verbs no longer form their Past and Perfect stems in such a uniform way. Thus it is more convenient to discuss the three stems separately. A list of synthetic verbal forms, together with the type of stem on which they are based, is given below:

(334) Present stem	Past stem	Perfect stem
Present	Past	Perfect
Future	Active Past Participle	Perfective Converb
Permissive	Intensive	(SS forms)
Imperative		
Conditional		
Subjunctive		
Present Participle		
Future Participle		
Passive Participles		
Destinative Participle		
Resultative Participle		
most converbs		
Infinitives		
Derivational forms		

The bare Present stem is also used as the form of the content verb that is combined with the negative auxiliary in the negative conjugation, although it may be augmented by derivational affixes (Chapter 8).

7.1.1. Present stem

Examples of Present stems:

(335) Class I verbs   Class II verbs
      etete-   'work'   *dian-(a-)*   'say'
      olokto- 'cook'   *ujan-(a-)*   'float, swim'
      zawa-   'take, grab'   *ŋelewen-(e-)* 'frighten'
      umi-   'drink'   *gun-(e-)*   'say'
      bu-   'give'   *in-(e-)*   'come'
      tukä:-   'run'   *gulin-(e-)* 'leave'
      dogdi-   'hear'

7.1.1.1. Class I verbs

The Present stem is identical to the verbal root, which is always vowel-final for class I verbs. Generally, all vowels are possible stem-finally, although stems ending in a long or laryngealized vowel are infrequent. Verbs whose stem ends in a *u*-final vowel cluster exhibit the usual alternation discussed in 3.2.3. The syllable-final /u/ that occurs before a consonant is realized as /u/, while syllable-initially, before a vowel, it appears as the consonant /w/: *deu-mi* 'I get tired' <get.tired-1SG>, but *dew-u-i* 'one gets tired' <get.tired-PAS-PRP>.

7.1.1.2. Class II verbs

Class II verbs have a consonant-final root. The most common root-final consonant is /n/. In most forms based on the Present stem the root-final consonant /n/ is obligatorily followed by an epenthetic vowel A (/a/, /o/, or /e/, depending on vowel harmony, see 3.3). Among the forms derived from the Present stem the following require an epenthetic vowel after the root-final consonant for class II verbs:

(336) form   example
      Present and Present Participle *dian-a-mi*   'I say'
      Imperative   *dian-a-je*   'say'
      Conditional   *dian-a-muse-i* 'if I say'
      Purposive Converb   *dian-a-laga-i* 'so that I say'
      Resultative Participle   *dian-a-ktu*   'said'
      Destinative Participle   *dian-a-kči*   'meant for saying'
      Imperfective Converb   *dian-a-ŋie-i*   'when I was saying'
      Perfective Converb   *dian-a-isi*   'after I said'
      Infinitive   *dian-a-mi*   'saying'

Desiderative Infinitive	*dian-a-mugdi*	'wanting to say'
Causative and most		
derivational forms	*dian-a-wan-*	'cause to say'
bare verbal stem with the	*dian-a*	
negative verb		

However, the following forms of class II verbs are derived from the Present stem without the presence of an epenthetic vowel:

(337) | form | example | |
| --- | --- | --- |
| Future and Future Participle | *dian-zaŋa-i* | 'I will say' |
| Permissive | *dian-ta-mi* | 'I will say perhaps' |
| Subjunctive | *dian-za-i* | 'I might say' |

As follows from (336) and (337), an epenthetic vowel is inserted to prevent impossible biconsonantal clusters (such as *nj, nw, nm, nŋ*) or a cluster of three consonants (3.2.1). It is also present in the bare stem combined with the negative verb, since the Udihe word cannot normally end in a consonant (3.1.1). The epenthetic vowel is absent if the cluster which appears as a result of the suffixation of the *n*-stem is allowed by phonotactic rules (such as *nz* and *nt*).

It should be noted, however, that although the system described above is motivated from the phonotactic point of view and is reflected in Schneider's (1936) materials, some of our informants insisted on the epenthetized forms of the class II verbs in all cases. For such speakers, the epenthetic vowel *A* appears even if the potential consonant cluster is otherwise acceptable, so the Future, Permissive, and Subjunctive forms of the verb *dian-* are *dian-a-zaŋa-i, dian-a-ta-mi,* and *dian-a-za-i,* respectively. This clearly reflects an analogous tendency in verbal inflection, when class II verbs tend to move into class I and the epenthetic vowel is reanalyzed as part of the stem. In such cases we will hereafter place the epenthetic vowel *A* in brackets.

7.1.1.3. Old class II verbs

Schneider (1936) also cites a few class II verbs that end in a consonant other than /n/. According to his description, such verbs attach the thematic syllable *-dA-/-tA-* when deriving the Present stem (but not other stems). For example, *nag-da-* is the Present stem of the verb *nag-* 'get in, reach' (cf. the Past stem *nak-ki-*); *bap-ta-* is the Present stem of the verb *bap-* 'understand' (cf. the Past form *bak-pi-* < *bap-ki-*). In the modern language, however, these verbs belong to the morphonological class I, since the old thematic syllable *-dA-/-tA-* has undergone inclusion into the root and at present appears in all verbal forms, not

only those that are based on the Present stem. So in the modern language we deal with the vowel-final class I verbs *nagda-*, *bapta-*.

7.1.2. Past stem

7.1.2.1. Class I verbs

For class I verbs the Past stem is derived from the Present stem by lengthening the non-high stem-final vowel: /a/ → /a:/, /o/ → /o:/, /e/ → /e:/, /ä/ → /ä:/. This sound change developed historically as a compensatory lengthening after the loss of the pharyngeal /h/ (2.1.2). The pharyngeal was present within the Past marker of the class I verbs *-hA-* in the Northern dialect recorded by Schneider (1936) and Kormušin (1998). Thus, the Past stems attested by Schneider are, for example, the following: *etete-he-* for the verb *etete-* 'work', *olokto-ho-* for the verb *olokto-* 'cook', and *zawa-ha-* for the verb *zawa-* 'take'.

Exceptions are the root-final high vowels /i/ and /u/. The vowel /i/, in addition to lengthening, also shows a change in quality, and becomes a diphthongoid: /i/→ /ie/. The vowel /u/ does not lengthen, but the Past morph has the form *-o:-* after it: *u* + PAST → *uo:*. The verbal Present stems ending in a long or laryngealized vowel or a vowel cluster do not change in the Past, that is, for such verbs the Present and Past stems are identical to each other.

(338)   Class I verbs
        Present stem   Past stem
        etete-   *etete:-*
        olokto-   *olokto:-*
        zawa-   *zawa:-*
        umi-   *umi-e-*
        dogdi-   *dogdi-e-*
        bu-   *bu-o:-*
        tukä:-   *tukä:-*

If the stem ends in a glide-final cluster, the glide is realized as a consonant in the onset position: *deu-* → *dew-o:-* <get tired-PAST>.

7.1.2.2. Class II verbs

Class II verbs form the Past stem with the element *-ki* added to the verbal *n*-final root, which causes assimilation of /n/ into the velar /ŋ/ (see 2.2.3.4).

(339)   Class II verbs
              Present stem   Past stem
              dian-(a)   *diaŋ-ki-*
              ujan-(a)   *ujaŋ-ki-*
              ŋelewen-(e)   *ŋeleweŋ-ki-*

In the modern language, especially in the dialect of Bikin, free variation is also possible: Past forms of the class II verbs can be heard that are derived in the same way as the Past of the class I verbs, that is, with the lengthening of the epenthetic vowel -*A*-, for example:

(340) Present stem   Past stem
      in-e-   *ine:-*   ~   *iŋ-ki-*
      gun-e-   *gune:-* ~   *guŋ-ki-*
      dian-a-   *diana:-* ~   *diaŋ-ki-*

In the Northern dialect the Past stem of class II verbs derived with -*ki* is more regular. In this dialect, the suffix -*ki* derives the Past stem even for some class I verbs, such as, for example, the class I verb *bude-* 'die', which has two Past stems in free variation: *buk-ki-* and *bude:-*. In the Bikin dialect only the regular forms such as *bude:-* are attested for the class I verbs. The Northern dialect has also preserved to a greater extent the peculiarities of the old class II verbs (7.1.1.3), so they can form the Past tense with the suffix -*ki*-, cf. the Northern *nag-da:-ni* and *nak-ki-ni* 'he reached' <reach-PAST-3SG>. The form *nak-ki-ni* is obsolete for the dialect of Bikin, although it is easily recognized by the speakers.

7.1.3. Perfect stem

7.1.3.1. Class I verbs

For most class I verbs the Perfect stem is formed from the Present stem through the laryngealization of the stem-final vowel: /a/ → /'a/, /o/ → /'o/, /e/ → /'e/, /ä/ → /'ä/. The final vowels /i/ and /u/ do not laryngealize; the suffix -*ge*- is instead attached after them:

(341)   Class I verbs
              Present stem   Perfect stem
              etete-   *etet'e-*
              ʐawa-   *ʐaw'a-*
              olokto-   *olokt'o-*
              tukä-   *tuk'ä-*
              umi-   *umi-ge-*

dogdi-	*dogdi-ge-*
bu-	*bu-ge-*

7.1.3.2. Class II verbs

For the class II verbs the Perfect stem is formed by adding *-kA-* to the *n*-final root, which causes the assimilation of /n/ into /ŋ/:

(342)   Class II verbs

Present stem	Perfect stem
dian-	*diaŋ-ka-*
ujan-	*ujaŋ-ka-*
ŋele-wen-	*ŋele-weŋ-ke-*

7.1.4. Irregular verbs (auxiliaries)

Two verbs exhibit irregular stem formation: the copula *bi-* 'be' and the negative auxiliary *e(i)-*. The Perfect and Past stem for these verbs are formed with an element *s* that goes back to the old **-s-* (the etymological source of the pharyngeal /h/ found within the old Past stem marker, see 7.1.2). The stem types of the irregular verbs are shown below:

(343)

	'be'	negative auxiliary
Present stem	*bi-*	*e-* , *ei-*
Past stem	*bi-si-*	*e-si-*
Perfect stem	*bi-s'e-*	*e-s'e-*

For the negative verb the Present stem has two variations, *ei-* and *e-*. The stem *ei-* is used in some personal forms of the Present tense, and in the Infinitive. The element *-i-* here goes back to the regular Present tense marker also found in the 3rd person Present tense verbal inflection (7.2) and Present active participles (7.6.1.1.1). The stem *e-* is used for other forms that are based on the Present stem, and also for some Present tense personal forms (namely the 2nd Plural, the 3rd person, and the 1st Plural Exclusive).

Both auxiliary verbs also exhibit, in several other categories, stem patterns that are irregular. The verb *bi-* has the irregular Present Habitual *bie* (7.3.2.3). The form *bie* also functions as the stem that co-occurs with the negative auxiliary. The negative verb exhibits the irregular stem *ata-* in the Permissive and Subjunctive and the irregular Imperative (7.5.1). The irregular forms will be cited below when discussing the formation of inflectional categories.

It should be noticed that in the past the copula *bi-* could have a second stem *be-*. This can still be seen in the obsolete form *be-s'e* (Perfect) (SK 1091) and may be historically related to the postposition *bede* 'like'.

The negative copula *anči* is employed in negative constructions, mostly for existential negation (see Chapter 23) and is a component of several verbal compounds (8.3.3). It has the following temporal forms: *anči* for Present, *anči bi-s'e* or *anči bi-si-ni* for Past, *anči bi-zeŋe-ni* for Future, *anči bi-ze* for Subjunctive. In some contexts (23.2.2.2.3) it can take personal affixes; otherwise it does not express subject agreement. On its case forms see 4.3.2 and 23.2.2.2.3.

7.1.5. Functions of the bare verbal stems

The Present tense stem remains uninflected, first, when it follows the negative auxiliary verb (7.3), and second, in the continuative negative construction, when it co-occurs with the copula *ede-* 'become' (23.2.1.4). The bare Past stem coincides with the uninflected form of the Past active participle (7.6.1.1.2). The bare Perfect stem occurs in the periphrastic construction of alternating action (7.11.1). It also remains uninflected in the 3rd person Singular and Plural Perfect. Otherwise, all three verbal stems are always followed by at least one inflectional morpheme.

7.2. Personal inflections

7.2.1. Types of personal inflections

Depending on tense/mood categories, a verb can take six distinct series of subject agreement affixes. The following table presents personal affixes of each of the six paradigmatic types.

(344)	I	II	III	IV	V	VI
1SG	*-mi*	*-mi*	*-i*	*-i*	*-mi*	-
2SG	*-i*	*-i*	*-i*	*-i*	*-i*	*-jA, -i*
3SG	*-ini, -ili*	*Ø*	*Ø*	*-ni*	*-ni*	-
1PL IN	*-fi*	*-fi*	*-ti*	*-fi*	*-fi*	-
1PL EX	*-u*	*-u*	*-u*	*-u*	*-mu*	-
2PL	*-u*	*-u*	*-u*	*-u*	*-u*	*-jAu*
3PL	*-iti*	*-du*	*-du*	*-ti*	*-ti*	-

As (344) demonstrates, inflections of type VI exist only for the 2nd Singular and Plural, and differ significantly from the other types. They are used only in the Imperative. The 2nd Singular and 2nd Plural inflections are the same for types I

through V, while other inflections vary according to the type. The type IV inflections are completely identical to the personal possessive affixes (4.1.4).

The 3rd person affixes *-ini* and *-ili* are free phonetic variations (cf. 2.2.4.3). Type I 3rd person Singular and Plural personal inflections begin with the vowel /i/. Historically, the vowel /i/ did not belong to the personal inflection and it does not show up with the same inflections *-ni* (3SG) and *-ti* (3PL) in type IV. It goes back to the Present Participle affix: *-i* is a regular marker of Present active participles (7.6.1.1.1). This indicates that the 3rd person Present forms originated as participles, although for the modern language we analyze the vowel /i/ as a part of the inflection. Note that the 3rd person Present tense forms are therefore formally indistinguishable from the Present active participles with the personal inflections of the 3rd Singular and Plural: *wakca-ini* 'he hunts' <hunt-3SG> and *wakca-i-ni* 'hunting' <hunt-PRP-3SG>, etc. However, for the Present active participle the suffix *-i-* is found in all persons and numbers and not only for the 3rd person (see 7.5.1.1.1) as for the Present tense finite forms. Thus, the whole Present tense paradigm cannot be completely associated with the participles, and only the 3rd person forms clearly have a participial origin.

7.2.2. Distribution of personal inflections

Each of the personal inflection types appears in a number of particular inflectional categories. This dependency is shown below.

(345) Type I   Present
       Type II   Permissive, Subjunctive
       Type III   Perfect, Conditional
       Type IV   Future, Converbs, Present Participle, Future, Participle
       Type V   Past, Past Participle
       Type VI   Imperative

In a verbal form the tense/mood suffix or the marker of a certain non-finite form normally follows the stem immediately. Personal inflections usually occupy the rightmost position in the word, that is, they follow these affixes. The only exception is the 3rd person inflection *-du-* in the II and the III paradigmatic types which immediately follows the verbal stem and therefore precedes the tense/mood marker, or the marker of the non-finite form, for example, *etete-du-ze* 'let them work' <work-PL-SUBJ>. Moreover, for class I verbs ending in *-i* or *-u* whose Perfect stem is derived by the element *-ge-*, the 3rd Plural inflection *-du-* precedes this element *-ge-*. For example: *umi-du-ge* 'they have drunk' <drink-PL-PERF>.

Sometimes the 3rd person Singular inflection is absent in the Future: *bi-zeŋe* 'he will be' <be-FUT> (SK 1107), *e-zeŋe b'a-gi* 'will not find again' <NEG-FUT find-REP>.

7.3. Negative conjugation

The negative conjugation is periphrastic and can be formed in two alternative ways. First, most verbal categories are negated with the negative auxiliary verb *e(i)-* (7.1.4) in the corresponding temporal/aspectual/modal form followed by a bare Present stem of the matrix verb (see also 23.2). The negative verb *e-* appears in a morphological form that reflects the role of the predicate in the sentence. Secondly, for other categories the negative construction has three components: the negative verb in a certain form + the bare verbal stem + the copula verb 'be' in a corresponding tense. These two types do not duplicate the opposition synthetic/analytic.

The content verb appears as a bare stem or as a stem augmented by derivational affixes. It may also take the suffixes *-du-* in the Plural or the bound Plural word *getu*, although, like all other Plural markers, they are not obligatory. The stems of the negative verb are presented in (7.1.4) and its conjugation is exemplified in 7.3.

The examples below illustrate the different forms of the content verb in negative sentences: class I verbs (346), class II verbs for which the *n*-final stem appears in the epenthesized form (347), and stems augmented by the Plural affix *-du* (348).

(346) a. *Bi   ei-mi   sa:.*
          me   NEG-1SG   know
          'I don't know.'

      b. *Ine'i   e-ini   ŋene.*
          dog   NEG-3SG   go
          'The dog is not walking.'

(347) *Sin-tigi   e-zeŋe-i   dian-a.*
       you-LAT   NEG-FUT-1SG   say-0
       'I won't tell you.'

(348) *Nua-ti   emne-de   namun-tigi   e-s'e   xuli-du.*
       he-3PL   once-FOC   sea-LAT   NEG-PERF   travel-PL
       'They have not traveled to the sea even once.'

7.4. Formation of the Indicative tense/aspect forms

The non-Indicative verbal forms are described in section 7.5; this section deals with Indicative categories. The Indicative distinguishes three types of aspectual forms: the General aspect, the Progressive aspect, and the Habitual aspect. In each aspect several tense categories are possible. The resultative aspect is not completely grammaticalized, and therefore is not addressed here. It is rendered

by means of a special copular construction (17.2.2.5). On derivational affixes with various aspectual meanings, see 8.2.2.

7.4.1. General aspect

General aspect indicative forms are synthetic, except for the analytic pluperfect.

7.4.1.1. Present

The Present tense does not have a special marker. It is formed by attaching type I personal inflections to the Present stem. For class II verbs an epenthetic vowel is inserted between the stem and the personal inflections.

(349)	*wakca-mi*	'I hunt'	<hunt-1SG>
	wakca-u	'you hunt'	<hunt-2PL>
	wakca-ini	'he hunts'	<hunt-3SG>
	dian-a-mi	'I say'	<say-0-1SG>
	dian-a-u	'you say'	<say-0-2PL>

If the stem ends in /i/ or an *i*-final cluster, the 3rd person inflections lose their vowel /i/: *ekei-* 'stop' → *ekei-ni* (< *ekei-ini*) 'he stops' <stop-3SG>.

The Present tense forms are negated by the negative verb in the Present followed by the bare Present stem of the content verb: *ei-mi wakca, dian-a* 'I don't hunt, say' <NEG-1SG hunt, say-0>, *e-u wakca, dian-a* 'you (PL) don't hunt, say' <NEG-2PL hunt, say-0>, etc. Examples of the copular verb 'be' in the Present tense are *bi-mi* 'I am' <be-1SG> and *bi:-ni* 'he is' <he-3SG>; see 7.6 for the whole paradigm.

7.4.1.2. Past

Likewise, the Past tense is not indicated by a special suffix. It is formed from the Past stem by attaching type I personal inflections.

(350)	*wakca:-i*	'you hunted'	<hunt.PAST-2SG>
	wakca:-fi	'we hunted'	<hunt.PAST-1PL.IN>
	dian-ki:	'you said'	<say.PAST-2SG>
	dian-ki-fi	'we said'	<say.PAST-1PL.IN>

Class II verbs may also have alternative forms appearing as a result of analogy with class I verbs: *diana:-ni* 'he said' <say.PAST-3SG> (*-a-* is an epenthetic

vowel that was reinterpreted as part of the stem and lengthened in the Past, like the stem-final vowels of the class I verbs).

In the negative conjugation a negative verb in the Past is followed by the bare Present tense stem of the content verb: *e-si-mi wakca, dian-a* <NEG-PAST-1SG hunt, say> 'I didn't hunt, say', *e-si-u wakca, dian-a* <NEG-PAST-2PL hunt, say> 'you didn't hunt, say', etc.

7.4.1.3. Perfect

The Perfect forms are based on the Perfect stem, which in this case is followed by type III inflections (351a). The 3rd person Plural follows a different pattern: for *i*- and *u*-final verbs the inflection *-du* precedes the marker of the Perfect stem *-ge* (351b). For the other class I verbs the personal inflection *-du* follows the Present stem (that is, the root-final vowel is not laryngealized as in the Perfect stem (351c). For the class II verbs the inflection *-du* follows the root and the epenthetic vowel *-A-* and precedes the marker of the perfect stem, which is *-ge* in this case (351d).

(351)	a.	*etet'e-i*	'I have worked'	<work.PERF-1SG>
		diaŋ-ka-i	'I have said'	<say-PERF-1SG>
	b.	*umi-du-ge*	'they have drunk'	<drink-PL-PERF>
		bu-du-ge	'they have given'	<give-PL-PERF>
	c.	*jexe-du*	'they have sung'	<sing-PL>
		wakca-du	'they have hunted'	<hunt-PL>
	d.	*dian-a-du-ge*	'they have said'	<say-0-PL-PERF>
		i:n-e-du-ge	'they have entered'	<enter-0-PL-PERF>

The negative forms are derived with the Perfect of the negative verb and the bare present stem of the content verb: *e-s'e etete, dian-a* 'he has not worked, said' <NEG-PERF work, say-0>. The Perfect of the copula 'be' is formed from the stem *bi-s'e*, cf. *bi-s'e-du* 'they have been' <be-PERF-PL>.

7.4.1.4. Future

Future forms are derived from the Present stem with the future suffix *-zAŋA-* followed by IV type inflections. Class II verbs have an optional epenthetic vowel after the stem in the Future. Examples: *ŋua-zeŋe-fi* <sleep-FUT-1PL.IN>, *dian-(a)-zaŋa-fi* <say-0-FUT-1PL.IN> 'we (IN) will sleep, say'. The negative forms include the Future of the negative verb and the bare present stem of the content verb: *e-zeŋe-fi ŋua* 'we (IN) won't sleep' <NEG-FUT-1PL.IN sleep>.

7.4.1.5. Pluperfect

The Pluperfect is the only analytic tense in the General aspect Indicative. It is formed with the Past Participle of the content verb followed by the copula *bi-* (on the formation of the personal and impersonal Past Participles see 7.5.1.1.2). The Pluperfect may be formed in three different formal ways, which are in free variation and do not exhibit any apparent difference in meaning:

(i) impersonal Past Participle + copula in the Past

(352) *umi-e bi-si-mi*   'I had drunk'   <drink-PP be-PAST-1SG>
       diaŋ-ka bi-si-ni   'he had said'   <say-PP be-PAST-3SG>
       camna: bi-si-mi   'I had broken'   <break.PP be-PAST-1SG>

(ii) impersonal Past Participle + copula in the Perfect

(353) *umi-e bi-s'e-i*   'I had drunk'   <drink-PP be-PERF-1SG>
       diaŋ-ka bi-s'e   'he had said'   <say-PAST be-PERF>

(iii) personal Past Participle + copula in the 3rd person Perfect

(354) *koŋko:-i bi-s'e*   'I had broken'   <break.PP-1SG be-PERF>
       koŋko:-ni bi-s'e   'he had broken'   <break.PP-3SG be-PERF>
       koŋko:-ti bi-s'e   'they had broken'<break.PP-3PL be-PERF>

Thus, personal inflections attach either to the copula (in the Past or Perfect) or to the content verb (Past Participle). The 3rd person (uninflected) Perfect copula that remains unchanged for the whole paradigm is also attested for other analytic forms (see 7.3.2 and 7.3.3).

In the negative conjugation, the negative verb is in the Past or Perfect, and the content verb has the form of the Past Participle: *e-si-mi koŋko:* 'I hadn't broken' <NEG-PAST-1SG break.PP>, *e-s'e-i diaŋ-ka* 'you (SG) hadn't said' <NEG-PERF-2SG say-PP>, *e-s'e-i ise:* 'I hadn't seen' <NEG-PERF-1SG see.PP>, etc. The copula 'be', therefore, is replaced by the negative auxiliary.

7.4.2. Habitual aspect

Habitual forms are analytic. They follow this general schema: impersonal Present Participle + copula *bi-* in the corresponding tense. The Present Participle is derived from the Present stem with the suffix *-i-*, for example, *wakca-i* 'hunting' <hunt-PRP>, *dian-a-i* 'saying' <say-0-PRP> (for more details see 7.6.1.1.1). The participle does not take personal inflections in the Habitual, and only in the 3rd person Plural can the Plurality marker *-du* be added instead of the participial suffix *-i*: *wakca-du* 'hunting (PL)' <hunt-PL>,

dian-a-du 'saying (PL)' <say-0-PL>. However, in functions other than the Habitual *-i-* is obligatory for Present Participles in all inflectional forms, including the 3rd person Plural (see 7.5.1.1.1). In the Habitual the 3rd person Plural *getu* is sometimes used instead of the more regular *-du*.

(355)   *Egdi   ni: wan-a-mi   ei   ñoni   getu* (or: *ñoni-du*).
      many   man   swim-0-INF   NEG   can   PL (or: can-PL)
      'Many people cannot swim.'

7.4.2.1. Present Habitual

In the Present Habitual the copula verb *bi-* is either overtly present, or it is not. Typically, in the Present the copula *bi-* is omitted, thus Habitual Present forms are identical for all persons and numbers except for the 3rd person Plural: *bi wakca-i* 'I usually hunt' <me hunt-PRP>, *nua-ni wakca-i* 'he usually hunts' <he-3SG hunt-PRP>, *nua-ti wakca-du* 'they usually hunt' <he-3PL hunt-PL>. Less frequently (and especially in the Northern dialect) the Present Habitual in the Singular is expressed by a bare Present stem rather than the Present Participle.

(356)   a.   *Su: käu-käu   calugo-won-o   ima:-wa-da*
           sun   all-all   melt-CAUS-0   snow-ACC-FOC
           calugo-won-o   okto-do   bagdi-wen-e.
           melt-CAUS-0   grass-FOC   grow-CAUS-0
           'The sun melts everything, it melts the snow, and it makes the grass grow.' (K 124)
      b.   *Su:-de   su:-ne.*
           sun-FOC   shine-V
           'The sun is shining.' (K 122)

However, it is difficult to decide on the basis of the existing recordings of the Northern dialect whether such forms do indeed represent the bare verbal stem, or are just an erroneous recording of the regular Present Habitual ending in *-i*. After a vowel, the word-final *i* is very much reduced (like ⁱ), and can easily be missed.

Occasionally the Present Habitual forms may include the impersonal Habitual copula *bie* (see 7.4.2.3). In this case, the Present Habitual becomes analytic in the same way as other tenses in the Habitual aspect. Such forms are completely interchangeable with the non-analytic Present Habituals, for example, *nua-ni wakca-i* <he-3SG hunt-PRPR> and *nua-ni wakca-i bie* <he-3SG hunt-PRP be.PRES.HAB> are synonymous, and both mean 'he usually hunts'. The content verb may occasionally take personal suffixes in this case:

(357) *Sul'ai dian-a-ini*   *bie*   *uti.*
   fox speak-0-PRP-3SG be.PRES.HAB this
   'This is the fox speaking.' (K 158)

7.4.2.2. Past and Future Habitual

In the Past and Future the copula is not omitted (except for the negative forms, see below), and it takes personal agreement affixes. In the Past tense it can have the Past form, for example: *wakca-i bi-si-mi* 'I used to hunt' <hunt-PRP be-PAST-1SG>, *wakca-du bi-si-ti* 'they used to hunt' <hunt-PL be-PAST-3PL>. More often, however, it has the Perfect form: *wakca-i bi-s'e-i* 'I used to hunt' <hunt-PRP be-PERF-1SG>. The 3rd person Plural affix is attached to the content verb and not to the copula: *wakca-du bi-s'e* 'they used to hunt' <hunt-PL be-PERF>. Another example:

(358) *Anana*   *udie* *soŋgo* *sita-wa-ni* *igisi-du bi-s'e.*
   long.ago Udihe bear son-ACC-3SG keep-PL be-PERF
   'The Udihe used to keep bear cubs (at home).'

A few marginal examples were also found in which both the participle and the copula take personal inflections.

(359) *Ag'a* *zugdi:*   *wo-isi-ni* *bu* *belesi-u*
   brother house.REF make-PC-3SG we help-1PL.EX
   bi-s'e-u.
   be-PERF-1PL.EX
   'When my brother built a house, we helped him.'

In the Future the copula has the usual Future form (see 7.4.1.4), for example: *wakca-i bi-zeŋe-i* 'I will usually hunt' <hunt-PRP be-FUT-1SG>, *wakca-du bi-zeŋe-ti* 'they will usually hunt' <hunt-PL be-FUT-3PL>.

7.3.2.3. Irregular verbs

The copula verb *bi-* 'be' has special Habitual non-analytic impersonal forms in the Present and the Past. In the Present it has a special impersonal form *bie* 'there is/there are', which does not take agreement affixes. This form functions as an independent verb in some copular constructions (Chapter 17). It is also found within analytic verbal forms, where it substitutes for the regular (non-Habitual) Present tense of the verb 'be', for example, in the analytic Present Progressive (7.4.3), or Present Habitual (7.4.2.1). The Past Habitual of the verb 'be' is the impersonal form *bi-s'e* or *bie bi-s'e* 'used to be', while the

Future Habitual has regular forms inflected for person and number such as *bie bi-zeŋe-ni* 'he will usually be' <be.PRP be-FUT-3SG>, etc. The form *bi-s'e* is in fact the bare Perfect stem of the verb 'be' (8.1.4), but it seems that for the Habitual copula the Past and the Perfect are neutralized: the form *(bie) bi-s'e* simply expresses past tense reference in the Habitual aspect.

In the negative conjugation in the Present tense the Negative stem *ei* (which in fact coincides with the Present Participle of the negative verb) is followed by the bare stem of the content verb: *ei eme* 'he does not usually come' <NEG come>, *ei ŋene-du* 'they do not usually go' <NEG go-PL>. In the Past and Future the negative verb *ei* is followed by the verbal stem and the Past (or Perfect) and the Future form, correspondingly, of the verb 'be': *ei wakca bi-si-mi* 'I did not usually hunt' <NEG hunt be-PAST-1SG>, *ei wakca bi-zeŋe-i* 'I will not usually hunt' <NEG hunt be-FUT-1SG>. An example of the negative Past Habitual follows:

(360)   *Anana*   *udie*   *oño-mi*   *ei*   *ñoni*   *bi-s'e,*
        long.ago   Udihe   write-INF   NEG   can   be-PERF
        taŋi-mi-de   *ei*   *ñoni*   *bi-s'e.*
        read-INF-FOC   NEG   can   be-PERF
        'Earlier the Udihe could neither write nor read.'

7.4.3. Progressive aspect

Progressive forms are also analytic. They include the Infinitive of the content verb that has the suffix *-mi* (see 7.6.3.1), and the copula *bi-* inflected for the corresponding tense (Present, Past, or Future) and agreement.

7.4.3.1. Present Progressive

In the Present the copula is usually omitted, although this is not necessarily so: *wakca-mi (bi:-ni)* 'he is hunting' <hunt-INF be-3SG>, *wakca-mi (bi:-ti)* 'they are hunting' <hunt-INF be-3PL>, etc. The copula is most likely to be omitted (and in fact must be omitted) when the final vowel of the infinitive form *-i* is pronounced with the "emphatic" lengthening *-i* → *-ie* (2.1.5.1). Such lengthening occurs only in the Present tense progressive forms and usually encodes a particular emphasis on the verb. The verb itself is often repeated twice in this case to express the continuation of the action. Cf. (361) where (361a) is the traditional refrain of the Udihe tales.

(361)   a.   *bi-mie bi-mie* 'he/she (they) was (were) living, living'
             <be-INF be-INF>

b. *nua-ni wakca-mie wakca-mie* 'he is hunting, hunting'
    <he-3SG hunt-INF hunt-INF>

The impersonal Habitual copula *bie* (7.4.2.3) may be used instead of the regular Present tense copula (*bi:-ni* etc.). Such a copula cannot be omitted: *zegde-mi bie* 'it is burning' <burn-INF be.PRES.HAB> is synonymous to *zegde-mi* (*bi:-ni*) <burn-INF be-3SG>.

7.4.3.2. Past and Future Progressive

In the Past the copula has either the Past form or the Perfect form, and these are used interchangeably and are never omitted. For example: *umi-mi bi-si-ni* <drink-3SG> or *umi-mi bi-s'e* <drink-INF be-PERF> 'he was drinking'. In the Future the copula takes the Future form and is not omitted: *umi-mi bi-zeŋe-ni* 'he will be drinking' <drink-INF be-FUT-3SG>.

7.4.3.3. Negative forms

Progressive forms are negated by the Infinitive of the negative verb followed by the verbal stem and the corresponding temporal form of the copula 'be', which is null in the Present tense, for example: *bi ei-mi umi* 'I am not drinking', *ei-mi umi bi-si-mi* 'I was not drinking' <NEG-1SG drink be-PAST-1SG>, *ei-mi umi bi-zeŋe-i* 'I will not be drinking' <NEG-1SG drink be-FUT-1SG>.

7.5. Non-Indicative moods

Non-Indicative moods comprise the Imperative, Necessitative, Conditional, Subjunctive, and Permissive. Note that given the partial intersection of their functions, all the terms used for the oblique moods are highly conventional. Oblique moods do not exhibit aspectual and temporal oppositions.

7.5.1. Imperative

The Imperative exists only for the 2nd person Singular and Plural. These forms are derived from the Present tense stem by adding type VI inflections, which are characteristic only of the Imperative. Examples: *diga-ja* 'eat' <eat-IMP.2SG>, *diga-ja-u* 'eat (PL)' <eat-IMP-2PL>, *dian-a-ja* 'say' <eat-0-IMP.2SG>, *dian-a-ja-u* 'say (PL)' <say-0-IMP-2PL>. For the 2nd Singular it is also possible to use the bare Present stem without any personal inflection: *diga* 'eat'. Such forms are particularly expressive and are used to

give a categorical order. The *e*-final verbal stems occasionally exhibit the drop of the stem final vowel before the 2nd person Plural Imperative suffix, which shows up as *-iu* in this case, for example: *gulini-u* (< *guline-je-u*) 'go (PL)'. The *i*-final verbal stems often demonstrate contraction with the Imperative marker. The 2nd person Singular Imperative affix contracts with the stem final vowel so that the resulting form ends in the diphthongoid /ie/ (< *i-je*) or the long /i:/ (< *ii* < *ij* < *i-je*), for example: *bugie* 'give (SG)' (from the verb *bugi-* 'give (back, again)'), *gazi:* 'take' (from *gazi-* 'take'). The 2nd person Plural affix can contract into *-i:u*, for example: *gazi:-u* 'take (PL)' <take-IMP.2PL>. Often the Imperative is followed by the Hortative particle *-zA*. In such cases the 2nd Singular inflection can be shortened into *–i*, for example: *etete-i-ze* 'work' <work-IMP.2SG-HORT>. The 2nd Plural inflection remains unchanged: *etete-je-u-ze* 'work (PL)' <work-IMP-2PL>.

The negative verb in the Imperative is *e-zi* (2SG) and *e-zi-u* (2 PL), for example: *e-zi etete* 'don't work' <NEG-IMP.2SG work>. The form of the verb 'be' in the Imperative is *bi-e* 'be' or *bi-je* <be-IMP.2SG>.

7.5.2. Subjunctive

The Subjunctive is synthetic. It is based on the Present stem followed by the suffix *-zA-* and type II personal inflections. Class II verbs show an optional epenthetic vowel after the stem.

(362)	*wakca-za*	'let him hunt'	<hunt-SUBJ>
	wakca-za-mi	'let me hunt'	<hunt-SUBJ-1SG>
	wakca-du-ze	'let them hunt'	<hunt-PL-SUBJ>
	dian-(a)-za-i	'let me say'	<say-0-SUBJ-1SG>

Although the type III inflection of the 3rd person Singular is a morphological null (7.2), a few cases are also attested when the Subjunctive 3rd person form has the regular 3rd person affix *-ni* (as in the personal inflection types I, IV, and V), for example: *bi-ze-ni* 'let it be' <be-SUBJ-3SG>. This is not a frequent option, however. The negative verb forms in the Subjunctive are derived from the stem *ata-*, for example: *ata-mi wakca* 'let me not hunt' <NEG.SUBJ-1SG hunt>, *ata wakca* 'let him not hunt' <NEG.SUBJ hunt>.

7.5.3. Necessitative

This category is analytic. Like another analytic form, the Pluperfect, it is formed in a number of alternative ways, which appear equivalent semantically. Generally speaking, the Necessitative is based on the Future Participle (see 7.6.1.1.3 for its formation) and the copula 'be'. The major formal (although not

semantic) difference is between the forms that exhibit subject agreement, and those that do not.

Non-finite Necessitative forms (participles and the conditional converbs) are also analytic and are described in sections dealing with non-finite forms (7.6).

7.5.3.1. Subject agreement forms

The subject agreement Necessitative can be formed in several formal ways. The difference between them originates in the position of the personal inflections and the choice of the copula. The following options are available.

(i) impersonal Future Participle of the content verb and the copula *bi-* in the Past:

(363) *wakca-zaŋa bi-si-ni*   'he had to hunt' <hunt-FP be-PAST-3SG>

(ii) impersonal Future Participle and the copula in the Perfect:

(364) *wakca-zaŋa bi-s'e*   'he had to hunt' <hunt-FP be-PERF>

(iii) personal Future Participle and the Perfect copula in the 3rd person, which remains unchanged for all persons and numbers:

(365) *nua-ni wakca-zaŋa-ni bi-s'e*   'he had to hunt'
                <he-3SG hunt-FP-3SG be-PERF>
                bi wakca-zaŋa-i bi-s'e   'I had to hunt'
                <me hunt-FP-1SG be-PERF>

The copula *bi-* can be replaced by the copula *nixe-* 'do' in the Past tense. In the latter case the meaning may be intentional: *wakca-zaŋa nixe:-mi* 'I was going to hunt' <hunt-FP do.PAST-1SG>.

Negative forms are derived with the Future Participle of the negative verb *e-zeŋe* followed by the verbal stem and the verb 'be' in the inflected Past or Perfect form: *e-zeŋe etete bi-si-*mi <NEG-FP work be-PAST-1SG> or *e-zeŋe etete bi-s'e-i* <NEG-FP work be-PERF-1SG> 'I didn't have to work'.

7.5.3.2. Forms without subject agreement

Personal Necessitative forms that do not exhibit subject agreement seem to originate from the Impersonal Necessitative (16.1.2.5), and are in fact formally identical to it. They are formed with the passive Future Participle of the content verb (on these participles see 7.6.1.2) and the 3rd person Singular Past of the Perfect form of the verb 'be'. The only formal difference from the Impersonal

Necessitative construction is that the subject must necessarily be overtly expressed in the sentence. Thus, since the conjugated verb ('be') can take only the 3rd person agreement marker, the subject agreement is suppressed for the 1st and 2nd person subjects. Examples are:

(366)   *bi etete-u-zeŋe bi-si-ni*   'I had to work'
        <me work-PAS-FP be-PAST-3SG>
        si gele-u-zeŋe bi-si-ni   'you had to call'
        <you call-PAS-FP be-PAST-3SG>
        nua-ni gele-u-zeŋe bi-si-ni   'he had to call'
        <he-3SG call-PAS-FP be-PAST-3SG>

Negative forms are organized in a similar way:

(367)   *bi e-u-zeŋe oño bi-si-ni*   'I didn't have to write'
        <be NEG-PAS-FP write be-PAST-3SG>
        si e-u-zeŋe gele bi-si-ni   'you didn't have to call'
        <you NEG-PAS-FP call be-PAST-3SG>

7.5.4. Conditional

The Conditional mood is synthetic and is derived from the Present stem followed by the Conditional suffix *-muse-* and type III personal suffixes, for example: *wakca-muse-i* 'I would hunt' <hunt-COND-1SG>. For class II verbs the epenthetic vowel *-A-* is inserted after the stem and before the conditional suffix: *dian-a-muse-i* 'I would say' <say-0-COND-1SG>. In the 3rd person Plural the personal inflection *-du-* precedes the conditional suffix: *wakca-du-muse* <hunt-PL-COND>, *dian-a-du-muse* <say-0-PL-COND> 'they would hunt, say'.

Negative forms: *e-muse-i wakca* 'I wouldn't hunt' <NEG-COND-1SG hunt>, *e-muse-u wakca* 'we wouldn't hunt' <NEG-COND-1PL.EX hunt>, etc.

7.5.5. Permissive

The Permissive is based on the Present stem, and has the suffix *-tA-* and type II personal inflections. For class II verbs an optional epenthetic vowel may be present.

(368)   *ŋene-te-mi*   'I will perhaps go'
        <go-PERM-1SG>
        zima-ta-u   'we will visit (you) sometime'
        <visit-PERM-1PL.EX>

bu-te-u	'we (EX) will perhaps give'
<give-PERM-1PL.EX>	
diga-ta	'he may eat'
<eat-PERM>	
dian-(a)-ta-u	'we will perhaps say'
<say-0-PERM-1PL.EX>	
dian-(a)-ta-mi	'I will perhaps say'
<say-0-PERM-1SG>	

Permissive forms are almost always followed by the hortative clitic particle *-zA* (see examples in section 7.9.5).

The negative verb in this mood has the non-standard stem *ata-* which is followed by type II personal inflections and the bare Present stem of the content verb: *ata-mi mute* 'I won't be able perhaps' <NEG.PERM-1SG can>. So, for the negative verb the Permissive and Subjunctive (7.5.2) are neutralized. The verb 'be' behaves like a regular verb in the Permissive, for example: *bi-te-ze* 'it will perhaps be' <be-PERM-HORT>.

7.6. Non-finite forms

Non-finite forms do not normally express independent predication, but serve to express the predicate of the subordinate clause. In some cases certain types of participles and infinitives serve as finite predicates. However, they co-occur with the auxiliary verb *bi-* 'be', and therefore, strictly speaking, the participle or the infinitive itself does not take the finite position in the sentence. Analytic forms of that type are described in the sections on finite verbal forms (7.4 and 7.5), and on copula constructions (Chapter 17).

Although some of the non-finite verbal forms exhibit the morphological categories of a noun (case and possessive), all of them behave like verbs with respect to their internal syntactic properties. They keep the valence patterns of the verb, their arguments appear in the same form as the corresponding finite verb, and they cannot be modified by nouns or adjectives. However, they are compatible with a VP-adverb, as shown by the next example where the Purposive converb is modified by a qualificative adverb in *-zi*.

(369) *Wo:-i*   *a:-zi*   *bi-lege-fi.*
       kill-IMP.2SG   good-INST   be-PURP-1PL.IN
       'Kill (him) in order that we may be well.'

Non-finite verbal forms have an internally fixed tense/aspect/mood structure. Most of them are specialized in conveying a particular temporal and/or modal meaning, and all of them are easily compatible with aspectual (*Aktionsart*) and

valence-changing affixes, subject to the usual semantic restrictions (on them see Chapter 8), for example:

(370) a.   *Ise-we-je*   *gakpa-si-u-we.*
           see-CAUS-IMP.2SG   shoot-IM-PAS.PRP-ACC
           'Show how one should shoot.' (SK 390)
      b.   *Ni:*   *sugzä-wa*   *nagda-li:*   *zuleixi*   *tukä:-iti.*
           man   fish-ACC   get-INC.PRP   forward   run-3PL
           'Those who struck the fish run forward.' (SK 337)

Certain non-finite forms have passive variants.

Udihe non-finite verb forms fall into three major classes on the basis of the inflectional categories they can express and the syntactic type of the subordinate clause in which they function: (i) participles; (ii) converbs; and (iii) infinitives. Participles express the relative clause, the complement clause, and sometimes, in combination with certain case suffixes or postpositions, the adverbial clause. Converbs prototypically express adverbial clauses of various semantics (and also, in some special cases, the complement clause). Infinitives form the complement clause or the adverbial clause of manner (for further details see section 7.10).

The following morpho-semantic subclasses of non-finite verb forms are further distinguished: for participles – active, passive, Resultative, and Destinative participles; for converbs – Purposive converb, Imperfective converb, Perfective converb, and Conditional converbs (including Realis Conditional converb, Irrealis Conditional converb for the Present and the Past and Necessitative Conditional converb); for Infinitives – Infinitive and Impersonal Infinitive. Infinitives are morphologically invariable. Participles, as opposed to converbs and infinitives, take a case inflection. Active participles in certain syntactic functions and most converbs take personal agreement morphemes which indicate the person and the number of the subject of the embedded clause. Such forms will be called personal. Impersonal forms of active participles are only inflected for number. Passive, Destinative, and Resultative participles do not have personal forms, that is, do not mark the person and the number of the embedded clause subject.

Personal forms of active participles and converbs usually encode not only information about the number and the person of the subordinate clause subject, but also information about its coreferential relations with the subject of the superordinate clause (switch-reference). In other words, these forms have special inflections, which indicate whether or not the subject of the subordinate clause is coreferential with the subject of the superordinate clause (for the notion of subject see 15.1.1). When there is coreference we will speak about same-subject (SS) markers; when there is not we will refer to different-subject (DS) markers. Different-subject markers are subject agreement markers, and therefore are distinguished for two numbers and all grammatical persons.

Same-subject markers have two number forms – Singular and Plural – but do not vary in person. Some generalizations on the system of switch-reference in Udihe can be found in 22.5.

The negative participles, converbs, and infinitives are formed in a regular way: with the help of the negative auxiliary verb *e(i)-* which takes all the corresponding morphological markers and the bare stem of the lexical verb which follows it, sometimes followed by the copula. Below we will cite for each particular category the corresponding form of the negative auxiliary verb.

The following summary table illustrates the system of the Udihe non-finite verb forms derived from the verbal stem *nodo-* 'lose' (the table does not include all personal forms for active participles and converbs, nor all case forms for participles; they are found in section 7.7).

(371) **Participles**
Active

Personal forms	DS 3SG	SS SG	SS PL
Present	*nodo-i-ni*	*nodo-i*	*nodo-i-fi*
Past	*nodo:-ni*	*nodo:-mi*	*nodo:-fi*
Future	*nodo-zoŋo-ni*	*nodo-zoŋo-i*	*nodo-zoŋo-fi*
Pluperfect	*nodo:-ni*	*nodo:-mi*	*nodo:-fi*
	bi-si-ni	*bi-si-mi*	*bi-si-fi*
Necessitative	*nodo-zoŋo*	*nodo-zoŋo*	*nodo-zoŋo*
	bi-si-ni	*bi-si-mi*	*bi-si-fi*

Impersonal forms	SG	PL
Present	*nodo-i*	*nodo-i getu*
Past	*nodo:*	*nodo: getu*
Future	*nodo-zoŋo*	*nodo-zoŋo getu*
Pluperfect	*nodo: bi-si*	*nodo: getu bisi*

Passive

Present	*nodo-u-j(i)*
Past	*nodo-so*
Future	*nodo-u- zeŋe*
Necessitative	*nodo-u-zeŋe bi-si-ni*

Resultative	*nodo-ktu*
Destinative	*nodo-kči*

Converbs	DS 3SG	SS SG	SS PL
Purposive	*nodo-logo-ni*	*nodo-logo-mi*	*nodo-logo-fi*
Imperfective	*nodo-ŋie-ni*	*nodo-ŋie-i*	*nodo-ŋie-fi*
Perfective	*nodo-isi-ni*	*nod'o-si*	*nodo-du-ge-si*
Conditional	*nodo-lisi-ni*	*nodo-li*	*nodo-lie*

Irrealis Present	*nodo-i bi-si*
Irrealis Past	*nodo: bi-si*
Irrealis Necessitative	*nodo-zoŋo bi-si*
Irrealis Necessitative Passive	*nodo-u-zeŋe bi-si*

Infinitive	*nodo-mi*
Impersonal Infinitive	*nodo-mu*
Future Infinitive	*nodo- zoŋo bi-mi*
Passive Impersonal Infinitive	*nodo-u-mu*

Basically, all converbs, infinitives, and participles can be formed from all types of verbs. Certain semantic restrictions exist only for Resultative Participles (see 7.10.1.4).

7.6.1. Participles

As was said above, participle forms inflected for person and number will be referred to as personal forms, as opposed to the impersonal forms which do not take personal affixes (but can be pluralized). Impersonal forms do not therefore encode the person of the subject of the embedded clause, as do personal forms. Active participles have both personal and impersonal forms, whereas other types of participles have only impersonal forms. For active participles, personal and impersonal forms differ in their syntactic usage: personal forms express the predicate either in the adverbial or complement clause, or in the relative clause which follows its head, while impersonal forms serve only in some types of prenominal relatives (for further details see Chapters 19–21). All types of participles inflect for case; active participles inflect for case only in the personal forms. Participles do not occur in the Destinative and do not have Partitive and Proprietive forms.

7.6.1.1. Active participles

Active participles distinguish three tense forms – relative Present, Past, and Future. Formally the tense markers of the Active participles are mostly identical to the tense markers of the finite verbs (in the Present, Past, and Future tenses) and are added to the same type of stem as in the corresponding finite verb (see 7.4). Thus, both the Future Participle and the Future finite verb are derived by means of the Future marker -*zAŋA*- attached to the Present stem. In the personal form the Future Participle takes type IV personal inflections, and so does the finite verb in the Future tense. Thus, *jexe-zeŋe-ni* <sing-FUT-3SG> means both 'he will sing' and 'the one who will sing (3SG)'. The same is observed in the Past: *jexe:-mi* <sing.PAST-1SG>, meaning both 'I

sang' and 'I who was singing'. In the Present, strict homonymy does not exist because the finite forms only take the Present marker in the 3ʳᵈ person (see 7.4.1.1). To avoid confusion, the glosses indicate the category of Participle (PP, PRP, and FP), as opposed to the finite verbs.

As was mentioned in 7.2.2, the 3ʳᵈ person agreement morpheme *-ni* may be optionally omitted in some finite forms. The same is observed with active participles.

7.6.1.1.1. Present active participles

Present active participles are derived from the Present stem with the suffix *-i*. For class II verbs this suffix follows the epenthetic vowel *-A-*. For class I *i*-final stems the participle suffix *-i-* is contracted with the stem final vowel into *-i:*. Impersonal Singular forms coincide with the bare participle form: *wakca-i* 'hunting' <hunt-PRP>, *dian-a-i* 'saying' <say-0-PRP>. In the Plural the impersonal forms take the Plural word *getu*, or – more rarely – *-du-*: *wakca-i getu* 'hunting (PL)' <hunt-PRP PL>, *dian-a-i-getu* 'saying (PL)' <say-0-PRP-PL>. The negative auxiliary impersonal form is *ei*. An example of the participle in the negative form is: *ei jexe* 'not singing (SG)', *ei jexe getu* 'not singing (PL)' <NEG.PRP sing PL>, *ei ñoni getu* 'not being able (PL)' <NEG.PRP can-PL>, *ei soŋo-du* 'not crying (PL)' <NEG.PRP cry-PL>.

For personal forms different-subject affixes coincide with regular possessive suffixes (or type IV inflectional affixes, see 7.2), for example: *wakca-i-ni* 'hunting (3SG)' <hunt-PRP-3SG>, *wakca-i-ti* 'hunting (3PL)' <hunt-PRP-3PL>, etc. In the Nominative for the 1ˢᵗ and 2ⁿᵈ persons the personal affix is contracted with the Participle marker: *i* [unstressed] + *i* → *i*, for example: *wakca-i* 'hunting (1SG, 2SG)' (< *wakca-i-i* <hunt-PRP-1SG, 2SG>). In the 2ⁿᵈ Plural and 1ˢᵗ Plural Exclusive the participle suffix *-i-* is missing, probably for the same phonetic reasons (*i* + *u* → *u*): *wakca-u* 'hunting (2PL, 1PL EX)' (< *wakca-i-u* <hunt-PRP-2PL, 1PL.EX>). In the function of the same-subject affixes, the reflexive possessive affixes are used: *-i* (truncated in the Nominative) for the Singular and *-fi* for the Plural. Examples: *wakca-i* 'hunting' <hunt-PRP.SS>, *wakca-i-fi* 'hunting' <hunt-PRP-SS.PL>.

Personal forms always inflect for case. The case suffix follows the participle affix *-i-* and precedes the personal affix. Case affixes are the same as for the class I nouns (see 4.1.3) except that in the Dative case two suffixes are found, *-di-* and *-du-*. In fact, *-di* is an assimilated variant of *-du*. It appears when the personal inflection that follows it contains the vowel /i/ (cf. 2.1.4.2). Thus, the affix *-di* is found in all personal forms except for the 1ˢᵗ person Plural Exclusive and 2ⁿᵈ person Plural, which contain the vowel /u/ and therefore do not assimilate the Dative suffix. The regular morphonological contraction takes place in the course of case inflection on the boundary of the case morpheme and the personal inflection (2.3.1), for example: *wakca-i-digi* ← *wakca-i-digi-i*

<hunt-PRP-ABL-1SG> 'I am hunting (ABL)'. For the same-subject participles the Accusative forms are homonymous with the Nominative forms. The illustrative case paradigms are presented in 7.7.

In negative personal forms personal inflections attach to the Present Participle of the negative verb: *e-i-mi* 1SG, etc. However, the behavior of the negative forms with respect to the case affix is flexible in the sense that in the syntactic positions that normally require case marking for the participle, the negative verb often does not take the case marker. The case marker then remains on the verbal stem. Compare, for example, (372a) where the negative auxiliary has the case suffix (Accusative) marking the semantic role of the relativized noun, and (372b) where the case suffix (Instrumental) is added to the verbal stem and not to the auxiliary.

(372) a. *Bi   sa:-mi*   *gugda   mo:*   *ei-we-ni*
          me   know-1SG   tall   tree   NEG.PRP-ACC-3SG
          bie.
          be.PRES.HAB
          'I know a tree which is not tall.'

      b. *Pakula   diasi-e-ni*   *gabzi   ni:*   *ei*
          Pakula   speak-PAST-3SG   happy   man   NEG.PRP
          bie-zi.
          be.PRES.HAB-INST
          'Pakula was speaking with a man who was not happy.'

The copula verb 'be' has two Present active participles: *bi:* (sometimes also *bei*) and *bie*. The personal forms can only be derived from the participle *bi:*, the form *bie* corresponds to the impersonal Habitual copula (see 7.4.2.3).

7.6.1.1.2. Past active participles

The Past active participle stem coincides with the usual Past stem. This means that for class I verbs it is formed by lengthening the stem-final vowel. Special cases are the *u-* and *i-*stems where the following sound changes are observed: *u* + PAST → *uo:*, *i* + PAST → *ie*. For class II *n*-final verbs, the Past stem is formed by the element *-ki* which assimilates the stem-final /n/ into /ŋ/ (7.1.2).

The Impersonal Past Participle forms in the Singular are formally identical with the bare Past stem; in the Plural they are followed by the Collective Plural word *getu*, cf. *wakca:* 'who was hunting (SG)', *wakca: getu* 'who were hunting (PL)' <hunt.PP PL>. Negative auxiliary forms are *e-si* <NEG-PAST> for the Singular and *e-si getu* <NEG-PAST PL> for the Plural. An example of the Past Participle in the negative form is *e-si umi* 'who was not drinking (SG)' <NEG-PAST drink>.

Personal forms take personal suffixes that differ from the suffixes used for Present Participles, namely they attach type V inflections: *wakca:-mi* 'who was hunting (1SG)' <hunt.PP-1SG>, *wakca:-mu* 'who were hunting (1PL)' <hunt.PRP-1PL.EX>. The same-subject inflections also differ: in the Singular *-mi* is used instead of *-i*, for example: *wakca:-mi* 'who was hunting (SS SG)' <hunt.PP-SS>. The Plural same-subject inflection is *-fi: wakca:-fi* 'who were hunting (SS PL)' <hunt.PP-SS.PL>.

Negative Past active participles in the personal forms are as follows: *e-si-ni* <NEG-PP-3SG>, *e-si-fi* <NEG-PP-1PL.IN>, etc. The auxiliary verb 'be' has the form *bi-si-*, which inflects for person and number.

When personal forms inflect for case, the case marker follows the Past stems and the personal inflection follows the case marker. When inflected for case, Past active participles behave as nouns of the morphonological class II: in all cases except for the Nominative and Accusative the consonant /n/ precedes the case inflection (see Chapter 4 on nominal inflection). This suggests that, like class II nouns, Past active participles have an *n*-final stem, but /n/ does not surface in the Nominative and Accusative. In participles derived from class I verbs there is no vowel lengthening, characteristic of the Past stem, before the surface /n/, for example: *wakcan-zi-ni* 'who was hunting' <hunt.PP-INST-3SG>. The participles derived from *u*-final and *i*-final verbs do not exhibit any vowel changes in cases other than the Nominative and Accusative, for example:

(373) *Lalin-zi*   *bude:-ni.*
       starve.PP-INST   die.PAST-3SG
       'He died from hunger.'

Class II verbs which form the Past stem with the element *-ki-* have in case forms the stem-final /n/ which follows *-ki-*, for example: *diaŋ-kin-zi:* 'who said' <say-PP-INST.SS>. The negative verb also has an *n*-stem, for example: *e-sin-zi-ni* <NEG.PP-INST-3SG>.

The case paradigms are presented in 7.7. For Past Participles the Accusative suffix is *-mA-* (it is identical to the class II noun Accusative, see 4.1.1.2.1). Like other same-subject participles and reflexive noun phrases, same-subject Past Participles have homonymous Accusative and Nominative forms (cf. 22.3.2). The Dative inflection is either *-di-* or *-du-* depending on the same conditions as apply to the Present active participles (7.6.1.1.1). In the Locative and Prolative, the Past active participles take the class II declension suffixes *-dile-* and *-dili-*, respectively (rather than class I declension suffixes *-le-* and *-li-*).

(374) *Si oloxi-we* *wan-dile-i* *ñö:*
you squirrel-ACC kill.PP-LOC-2SG sable
xokto-wo-ni *ise:-mi.*
footstep-ACC-3SG see.PAST-1SG
'I saw the sable's footsteps where you killed the squirrel.'

7.6.1.1.3. Future active participles

The marker of the Future Participle is the same as for the finite Future forms (see 7.4.1.4), that is, *-zAŋA-*. This affix follows the Present stem (with the optional epenthetic vowel for class II verbs). In the impersonal forms inflection is missing, for example: *wakca-zaŋa* 'who will hunt' <hunt-FP>, *dian-(a)-zaŋa* 'who will say' <say-0-FP>. In the Plural, impersonal forms take the Plural word *getu*: *wakca-zaŋa getu* 'who will hunt (PL)' <hunt-FP PL>, *dian-(a)-zaŋa getu* 'who will say (PL)' <say-0-FP PL>. Impersonal Future Participle forms of the negative verbs are: *e-zeŋe* for the Singular and *e-zeŋe getu* for the Plural. An example of the Future Participle in the negative form is: *e-zeŋe diga* 'who will not eat' <NEG-FP eat>.

Personal forms use the same set of different-subject and same-subject markers and case markers as the personal forms of the active Present Participles, that is, personal inflections of type IV. For example: *wakca-zaŋa-ni* 'who will hunt (DS 3SG)' <hunt-FP-3SG>, *wakca-zaŋa-i* 'who will hunt (SS SG)' <hunt-FP-SS>, *wakca-zaŋa-fi* 'who will hunt (SS PL)' <hunt-FP-SS.PL>. Examples of negative personal forms of Future active participles are: *e-zeŋe-ni wakca* 'who will not hunt (DS 3SG)' <NEG-FP-3SG hunt>, *e-zeŋe-i wakca* 'who will not hunt (SS SG)' <NEG-FP-SS hunt>.

Case paradigms are presented in 7.6. The Dative case suffix is either *-di-* or *-du-* as for the other participles.

7.6.1.1.4. Pluperfect active participles

Pluperfect active participles seem to be fairly rare verbal forms that are gradually being replaced in function by Past active participles. They are analytical forms that consist of the personal form of the Past active participle of the content verb and the (personal) form of the Past Participle of the copula 'be': *wa:-ni bi-si-ni* 'the one who had killed' <kill.PP-3SG be-PP-3SG>, *diaŋ-ki-ni bi-si-ni* 'the one who had said' <say-PP-3SG be-PP-3SG>.

The Pluperfect active participle in a subordinate clause expresses anteriority with respect to the situation of the superordinate clause.

(375) *Bi   kuti-we   ise:-mi   ni:-we*
      me tiger-ACC   see.PAST-1SG   man-ACC
      sieni-e-ni   bi-si-me-ni.
      wound-PP-3SG   be-PP-ACC-3SG
      'I saw the tiger that had wounded a man.'

7.6.1.1.5. Necessitative active participles

Necessitative Participles are analytic and derived with Future Participles in the impersonal form and the copula in the corresponding case and personal form of the Past Participle: *wakca-zaŋa bi-si-ni* 'who had to hunt (3SG)' <hunt-FP be-PP-3SG>, *wakca-zaŋa bi-si-u* 'who had to hunt (2PL)' <hunt-FP be-PP-2PL>, *jexe-zeŋe bi-si-mi* 'who had to sing (SS SG)' <sing-FP be-PP-SS>. Necessitative Participles do not seem to have impersonal forms.

7.6.1.2. Passive participles

Passive participles can be derived from practically all verbs, both transitive and intransitive. They have only impersonal forms, that is, they do not inflect for number and person. However, in a particular syntactic function they have case forms which are technically derived in the same way as the corresponding case forms of class I nouns (see 4.1.1.2.1). Case suffixes are attached in a way completely identical to class I nouns, therefore case paradigms are not presented below in section 7.7.

Present and Future passive participles are formed with two morphemes. The first is the Passive marker *-u-*, the second is the tense marker: either *-j(i)* for the Present tense (the forms with or without truncation of /i/ are free variations), or *-zAŋA* for the Future. The Past passive participles have a special affix *-se*, which encodes both the tense and the voice status of the participle. All passive participles are derived from the Present verbal stem.

The copula verb *bi-* 'be' has neither Present nor Future passive participles.

7.6.1.2.1. Regular verbs

Passive participles are presented below.

(376)

	'hunt'	'give'	'drink'
Class I verbs	*wakca-*	*bu-*	*umi-*
Present passive	*wakca-u-j(i)*	*bu-j(i)*	*umi-u-j(i)*
Past passive	*wakca-sa*	*bu-se*	*umi-se*
Future passive	*wakca-u-zeŋe*	*bu:-zeŋe*	*umi-u-zeŋe*

Class II verbs	*dian-* 'say'
Present passive	*diam-u-j(i)*
Past passive	*dian-a-sa*
Future passive	*diam-u-zeŋe*

For Present and Future passive participles, an epenthetic vowel is not present and the root-final consonant *-n* is changed into *-m*. An epenthetic vowel is inserted before the suffix of the Past Passive participle.

7.6.1.2.2. The negative verb

The negative auxiliary passive participle forms are:

(377)	Present	*e-u, e-u-j(i)*
	Past	*e-(u)-se, e-ptile*
	Future	*e-u-zeŋe*

The forms *e-u* and *e-u-j(i)* on the one hand, and *e-(u)-se* and *e-ptile* on the other, are in free variation. Examples of passive participles in the negative form are: *e-u-ji diga* 'which is not eaten' <NEG-PAS-PRP eat>, *e-se diga* 'which was not eaten' <NEG-PP.PAS eat>, *e-u-zeŋe diga* 'which will not be eaten' <NEG-PAS-FP eat>. Example (378) shows two different forms of the Present passive participle of the negative verb, while examples (379) demonstrate the same for Past passive participles.

(378) a. | *O-du* | *e-u* | *damisi.* |
         |----------|---------|-----------|
         | this-DAT | NEG-PAS | smoke |

   'One does not smoke here.'

   b. | *Ei* | *b'oto* | *e-u-ji* | *diga.* |
      |-------|----------|-------------|---------|
      | this | mushroom | NEG-PAS-PRP | eat |

   'This mushroom is not edible.'

(379) a. | *Ule:-we* | *e-u-se* | *olokto.* |
         |-----------|-----------|-----------|
         | meat-ACC | NEG-PAS-PP | cook |

   'The meat is not cooked.'

   b. | *Ugda-wa* | *e-ptile* | *aisi-gi-se.* |
      |-----------|------------|----------------|
      | boat-ACC | NEG-PP.PAS | mend-REP-EXP |

   'The boat is not mended.'

7.6.1.2.3. Passive Necessitative Participles

Passive participial forms with the Necessitative meaning are analytic and include the passive Future Participle and the Past Participle of the verb *bi-* 'be' in the 3rd person, for example: *wakca-u-zeŋe bi-si-ni* 'what had to be hunted for' <hunt-PAS-FP be-PP-3SG>.

7.6.1.3. Destinative Participles

Destinative Participles can be formed from virtually all verbs with the possible exception of the null-place verbs discussed in 14.1.1. They have personal and impersonal forms and are derived with the suffix *-kči* added to the Present verbal stem (which is followed by the epenthetic vowel for class II verbs). Case inflection occurs in the same way as with nouns and is therefore not illustrated in section 7.6. Destinative Participles cannot be pluralized. Examples:

(380) class I verbs   class II verbs
       jexe-kči   'meant for singing'   *dian-a-kči* 'meant for saying'
       bu-kči   'meant for giving'
       umi-kči   'meant for drinking'

The negative auxiliary verb does not have a Destinative Participle. Destinative Participles are negated with the help of a periphrastic construction (see section 23.2 "Negation").

7.6.1.4. Resultative Participles

Resultative Participles also only have impersonal forms. They inflect for case in the same way as class I nouns do. The suffix of the Resultative Participles is *-ktu* which is added to the Present tense stem (followed by the epenthetic vowel for class II verbs). Examples: class I verbs *jexe-ktu* 'sang', *bu-ktu* 'given', *umi-ktu* 'drunk'; class II verbs *dian-a-ktu* 'said' <say-0-RES>. Resultative Participles lack the morphological Plural. Plurality may be expressed with the restrictive particle *m'ei*, as for some adjectives (12.1.1.9.3).

Occasionally the Resultative Participle suffix is followed by the Past passive participle suffix *-se*, for example, *kimpi-ktu-se* 'closed' <close-RES-PP.PAS>. Such forms are usually only possible for transitives and do not differ in function from the usual Resultative Participles, so the Past passive participle affix is clearly redundant here. See example (381), which illustrates the use of such "combined" participles in the finite predicate position.

(381) *Ei*   *tuduze-we*   *siki-ktu-se.*
       this   potatoes-ACC   wash-RES-PP.PAS
       'These potatoes are washed.'

As in the case of Destinative Participles, the negative auxiliary verb does not have Resultative Participle forms. To negate Resultative Participles a periphrastic construction is used (see 23.2.1.5.3).

7.6.2. Converbs

Converbs are used to form subordinate (mostly adverbial) clauses. As was remarked above, they only have personal forms (except for the Irrealis Conditional Converb), which agree in person and number with the subject of the embedded clause (same-subject and different-subject forms are distinguished). Converbs do not inflect for case. Converb suffixes mark the semantic type of the converb and at the same time of the corresponding embedded clause. Personal affixes normally follow the converb affixes. There are two possible strategies to indicate switch reference, which depend on the type of converb. First, the same-subject and the corresponding different-subject converb can differ not only in personal inflections but also in the marker of the converb itself. This strategy is used in Conditional Converbs and Perfective Converbs. Second, the same-subject and the different-subject converbs can be formed by the same morpheme, but they differ in personal inflection. This strategy, also used for active participles (see 7.6.1.1), is applied in Purposive Converbs and Imperfective Converbs (see 22.5 for more discussion on the switch-reference system).

The suffixes of most types of converbs are added to the Present tense stem (followed by the epenthetic vowel for class II verbs). The only exception is the same-subject form of the Perfective Converb, which is based on the Perfect stem. Personal inflections are always of type IV for all converbs.

7.6.2.1. Purposive Converb

The Purposive Converb marker is *-lAgA-* followed by a personal inflection of type IV. Like all converbs, Purposive Converbs are derived from the Present stem. Examples: *wakca-laga-i* 'so that I hunt' <hunt-PURP-1SG>, *dian-a-laga-ni* 'so that he says' <say-0-PURP-3SG>. For same-subject forms reflexive possessive markers are used (*-mi* for Singular, *-fi* for Plural): *wakca-laga-i* 'so that one (SS SG) hunts' <hunt-PURP-SS>, *dian-a-laga-fi* 'so that one (SS PL) says' <say-0-PURP-SS.PL>. In reduced speech the Purposive Converb suffix *-lAgA-* is often phonologically shortened and pronounced as

-lA:- or *-lA-*, for example, *diga-la:-mi* or *diga-la-mi* instead of *diga-laga-mi* 'so that I eat', etc.

The negative auxiliary Purposive Converb forms are derived from the stem *e-lege-* with personal different-subject or same-subject affixes, cf.:

(382) Bu   e-lege-u   ŋua   eniŋe   ŋimaŋku-we
      we NEG-PURP-1PL.EX   sleep   mother tale-ACC
      ŋimasi-e-ni.
      tell-PAST-3SG
      'Our mother told the tale so we would not sleep.'

7.6.2.2. Imperfective Converb

The marker of the Imperfective Converb is *-ŋie-* (Northern *-ŋAgA-*), which follows the Present stem and precedes the personal same-subject or different-subject inflections. As for all converbs, different-subject inflections are type IV personal inflections, and the same-subject inflections are *-mi* for the Singular and *-fi* for the Plural. Examples: *wakca-ŋie-i* 'when I was hunting' <hunt-IC-1SG>, *dian-a-ŋie-ni* 'when he was speaking' <say-0-IC-3SG>, *wakca-ŋie-mi* 'when one was hunting (SS SG)' <hunt-IC-SS>. For class II verbs it is also possible to drop the stem-final consonant /n/ before the suffix of the Imperfective Converb: *dia-ŋie-ni* 'when he was speaking' <say-IC-3SG>.

Negative forms are derived from the negative auxiliary verbal form *ei* followed by the verbal stem and the Imperfective Converb of the verb 'be' with a same-subject or different-subject inflection, for example: *ei jexe bi-ŋie-i* 'when I was not singing' <NEG sing be-IC-1SG>, etc.

7.6.2.3. Perfective Converb

For the Perfective Converb same-subject forms and different-subject forms are derived from different verbal stems.

7.6.2.3.1. Different-subject

Different-subject forms are based on the Present stem (with the epenthetic vowel for class II verbs) to which the converb marker *-isi-* and type IV personal inflections are added. Examples: *umi:-si-ni* (< *umi-isi-ni* <drink-PC-3SG>) 'having drunk (3SG)', *wakca-isi-ti* 'having hunted (3PL)' <hunt-PC-3PL>, *dian-a-isi* (< *dian-a-isi-i* <say-0-PC-1SG, 2SG>) 'having said (1SG, 2SG)', *wo-isi-ni* 'having done (3SG)' <do-PC-3SG>.

The different-subject negative auxiliary forms are derived from the stem *e-isi-* with personal different-subject affixes, for example: *e-isi-ni umi* 'without

him having drunk' <NEG-PC-3SG drink>, etc. The Perfective Converb of the verb 'be' is *bi:-si-ni* 'having been (3SG)', etc.

7.6.2.3.2. Same-subject

For same-subject forms the converb suffix is *-si* and it is added to the Perfect verbal stem. The same-subject Singular personal inflection is missing, so *-si* in this case is a "portmanteau" morpheme, which marks not only same-subject, but also the function of the converb and of the corresponding embedded clause. Examples: *umi-ge-si* 'having drunk (SS SG)' <drink-PERF-PC.SS>, *wakc'a-si* 'having hunted (SS SG)' <hunt.PERF-PC.SS>, *diaŋ-ka-si* 'having said (SS SG)' <say-PERF-PC.SS>. In the Plural inflection *-du-* is inserted before the converb marker *-si* or precedes the Perfect stem marker *-ge-* of the *i*-final verbs: *wakc'a-du-si* 'having hunted (SS PL)' <hunt.PERF-PL-PC.SS>, *umi-du-ge-si* 'having drunk (SS PL)' <drink-PL-PERF-PC.SS>.

The negative auxiliary same-subject form is *e-s'e-li*, for example: *e-s'e-li umi* 'without having drunk (SS SG)' <NEG-PERF-PC.SS drink>, *e-s'e-du umi* 'without having drunk (SS PL)' <NEG-PERF.PC.SS-PL drink>. The forms of the verb *bi-* are: *bi-s'e-si* 'having been (SS SG)' <be-PERF-PC.SS> and *bi-du-ge-si* 'having been (SS PL)' <be-PL-PERF-PC.SS>.

At least one example is found in which the same-subject Perfective converb takes the Passive form encoded by the Passive marker *-u-* preceding the Perfect stem marker *-ge-*.

(383) *Kiliga-du*   *zabza-du*   *mala-u-ge-si*   *ono*
       snake-DAT   grass.snake-DAT   bite-PAS-PERF-PC.SS   how
       eku-ze-mi?
       go-SUBJ-1SG
       'How shall I go being bitten by snakes and grass snakes?' (SKX 226)

7.6.2.3.3. Same-subject converb in *-nA:*

The same-subject Perfective Converb in *-nA:* is obsolete and is actively used only with a closed class of verbs, such as *zawa-na:* 'having taken' (*zawa-* 'take'), *xebu-ne:* 'having brought' (*xebu-* 'bring'), *gazi-na:* 'having taken' (*gazi-* 'take'), *wende-ne:* 'having left' (*wende-* 'leave'), *oŋmo-no:* 'having forgotten' (*oŋmo-* 'forget'). Such converbs accompany verbs of movement.

(384) a. *Ise-si:-ni*   *eni-ni*   *b'ata-ŋi:*   *omo*
      see-IM-3SG   mother-3SG   boy-AL.REF   one
      aziga-wa   *xebu-ne:*   *eme-i-we-ni.*
      girl-ACC   bring-PC.SS   come-PRP-ACC-3SG
      'His mother sees that her son came with some girl.'

      b. *Ge: in'ei*   *xente*   *wende-ne:*   *ŋene:-ni.*
      bad dog   master   throw-PC.SS   go.PAST-3SG
      'The bad dog left, abandoning its master.'

      c. *Bu etete-zeŋe-fi*   *oŋmo-no:*   *'ai-we*   *m'ei*
      we work-FUT-SS.PL   forget-PC.SS   vodka-ACC   only
      umi-li-e-mu.
      drink-INC-PAST-1PL.EX
      'Having forgotten that we had to work, we started just drinking vodka.'

      d. *Bi abuga-i*   *bi*   *in'ei-we-i*   *xebu-ne:*
      me father-1SG   me   dog-ACC-1SG   take-PC.SS
      ŋene:-ni.
      go.PAST-3SG
      'My father left, having taken my dog.'

      e. *Bi od'o-wo*   *mama-wa*
      me grandfather-ACC   grandmother-ACC
      eniŋe-we   *wende-ne:*   *ŋene:-mi.*
      mother-ACC   throw-PC.SS   go.PAST-1SG
      'I went, having left the grandfather, the grandmother, and the mother.'

7.6.2.4. Conditional Converbs

Conditional Converbs fall into two types: (Realis) Conditional Converbs which express factual condition (7.6.2.4.1) and Irrealis Conditional Converbs which express a counterfactual condition (7.6.2.4.2).

7.6.2.4.1. Realis Conditional Converb

Different-subject forms of the Conditional Converb are formed with the suffix *-lisi-* followed by the different-subject markers (type IV personal inflections). Examples: *wakca-lisi-ni* 'if he hunts' <hunt-CC-3SG>, *dian-a-lisi-ti* 'if they say' <say-0-CC-3PL>. Same-subject forms use the suffixes *-li* for the Singular and *-lie* for the Plural. Examples: *wakca-li* 'if one (SS SG) hunts' <hunt-CC.SS>, *dian-a-lie* 'if one (SS PL) says' <say-0-CC.SS.PL>. All forms are derived from the present stem (with the epenthetic vowel for class II verbs).

Negative auxiliary same-subject forms are *e-li* for the Singular and *e-lie* for the Plural. For different-subject forms the negative auxiliary Conditional Converb is formed from the stem *e-lisi-* with the different-subject suffixes, for example: *e-lisi-ni jexe* 'if he doesn't sing' <NEG-CC-3SG sing>.

We also have at least one example in which the Conditional Converb has a passive form marked with the passive affix *-u-*.

(385) *E-u-li*   *xugi   bude   bude-ini.*
        NEG-PAST-CC.SS   turn   die   die-3SG
        'If it is not turned (back), it dies.'

7.6.2.4.2. Irrealis Conditional Converbs

Irrealis Conditional Converbs are analytic, they contain the impersonal active participle of the content verb and the copula *bi-si*, which does not change for different personal forms. The form *bi-si* is in fact the Perfective Converb of the verb *bi-* without personal inflections. Thus, the Irrealis Conditional Converb does not mark subject agreement; one form is used for all numbers and persons. Irrealis Conditional Converbs oppose two tenses, the Present and the Past formed with the Present and Past Participles, correspondingly, as well as the Necessitative, for which Future Participles are employed. The latter has the Passive form. Examples:

(386) Irrealis Conditional Converb Present
      i wakca-i bi-si   'if you hunted'
      <you hunt-PRP be-PAST>
      Irrealis Conditional Converb Past
      si wakca: bi-si   'if you had hunted'
      <you hunt.PP be-PAST>
      Irrealis Conditional Converb Necessitative
      si wakca-zaŋa bi-si   'if you had to hunt'
      <you hunt-FP be-PAST>
      Irrealis Conditional Converb Necessitative Passive
      wakca-u-zeŋe bi-si   'if one had to hunt'
      <hunt-PAS-FP be-PAST>

Negations are: *si ei wakca bi-si* 'if you didn't hunt' <you NEG hunt be-PAST>, *si e-si wakca bi-si* 'if you hadn't hunted' <you NEG-PP hunt be-PAST>, *e-u-zeŋe wakca bi-si* 'if one didn't have to hunt' <NEG-PAS-FP hunt be-PAST>.

7.6.3. Infinitives

Infinitives are morphologically invariable. They do not inflect for person/number or case. The Infinitives are formed with suffixes added to the Present stem (followed by the epenthetic vowel for class II verbs).

7.6.3.1. Infinitive

The marker of this Infinitive is *-mi*. Examples:

(387) Class I   Class II
      jexe-mi   'sing'   *dian-a-mi*   'say'
      bu-mi   'give'
      umi-mi   'drink'

Class II verbs occasionally have the stem-final /n/ consonant dropped before the Infinitive affix; obviously the epenthetic vowel is not present in this case, for example: *kepte-we-mi* 'make somebody lie' <lie-CAUS-INF>.

As is usual with the final /i/, the final vowel in the Infinitive suffix can often either be truncated or changed into *ie*, so forms such as *diga-m ~ diga-mie ~ diga-mi* 'eat' are variants that depend on the pronunciation style, the intonation, and the emphasis within the sentence (see also 2.1.5).

The negative Infinitive is formed from the negative auxiliary Present stem *ei-* by adding the Infinitive marker, for example: *ei-mi jexe* 'not to sing' <NEG-INF sing>.

7.6.3.2. Impersonal Infinitive

The Impersonal Infinitive is available, but is infrequent in the modern Bikin dialect, although it is commonly used in the Northern dialect. Schneider (1936) referred to it as the Plural Infinitive (Gerund, in his terms) and recorded it with the suffix *-mei*, and so did Kormušin (1998) and Sunik (1968: 225). In the modern Bikin dialect it is formed with the affix *-mu* (probably a result of the historical contraction from *-mei*).

(388) Class I   *jexe-mu*   'singing'
      Class II   *dian-a-mu*   'saying'   <say-0-IMI>

7.6.3.3. Future Infinitive

A few examples are found in which the Infinitive has a compound form: the Future Participle of the content verb is followed by the Infinitive of the copula

verb 'be' *bi-mi*, for example: *jexe-zeɲe bi-mi* 'going to sing' <sing-FP be-INF>. The Future Infinitive expresses the Necessitative or the Future meaning.

(389) a. | *Si* | *ceze* | *mun-e-we* | *mamasa-la-zaɲa* | *bi-mi* |
|---|---|---|---|---|
| you | true | we-0-ACC | wife-V-FP | be-INF |

a-wa	*namu*	*tagä-ixi-ni*	*mun-e-we*
that-ACC	sea	other.side-LAT-3SG	we-0-ACC

       gazi-je.
       take-IMP.2SG
       'If you really have to marry us, take us to the other side of the sea.'
       (K 185)

    b. | *Min-e-we* | *wa-zaɲa* | *bi-mi* | *min-e-we* |
|---|---|---|---|
| me-0-ACC | kill-FP | be-INF | me-0-ACC |

alasi-mi	*wa:-i.*
wait-INF	kill-PRP

       'Going to kill me, he waits for me and will kill (me).'

    c. | *Eme-zeɲe* | *bi-mi* | *bi* | *tu:-ɲi-ne-i* |
|---|---|---|---|
| come-FP | be-INF | me | pole-AL-DEST-1SG |

       wo-jie.
       make-IMP.2SG
       'Since they will come, make a pole for me.'

    d. | *Gele-je* | *min-e-we* | *niɲmele-zeɲe* | *bi-mi.* |
|---|---|---|---|
| ask-IMP.2SG | me-0-ACC | swallow-FP | be-INF |

       'Ask (him) if you are going to swallow me.' (SKX 268)

    e. | *Bi* | *pala-ɲi-wa-i* | *uniɲa-la-ja-u* |
|---|---|---|
| me | porridge-AL-ACC-1SG | spoon-V-IMP-2PL |

bi	*sita-la-i*	*ni*	*mafa-la-zaɲa bi-mi.*
me	child-LOC-1SG	who	husband-V-FUT be-INF

       'Whoever is going to marry my son, eat my porridge.' (SKX 188)

7.6.3.4. Passive Impersonal Infinitive

In the Northern dialect the Impersonal Infinitive has a passive variant, formed with the regular passive morpheme *-u-* (8.2.1.5.1) which precedes the Infinitive marker, cf.: *diga-u-mu* 'be eaten', *nodo-u-mu* 'be lost'. Examples of the Passive Infintive are:

(390) a. | *Kusige-zi* | *to:pti-tigi* | *sondo* | *bagaba-u-mu.* |
|---|---|---|---|
| knife-INST | heart-LAT | sin | poke-PAS-IMI |

       'It is a sin to poke a knife into (somebody's) heart.' (SK 135)

b. *Anana*   *j'e-we-de*   *gada-u-mu*   *egdi*
    earlier   what-ACC-IND   buy-PAS-IMI . much
    bi-s'e.
    be-PERF
    'Earlier there used to be many things to buy.' (SK 225)

c. *J'e-we-de*   *te-u-mu*   *anči.*
    what-ACC-IND   put-PAS-IMI   no
    'There is nothing to put (down).' (SK 116)

d. *Kala-zi*   *olokto-u-mu*   *jo:-ni*   *p'a-p'a*
    kettle-INST   cook-PAS-IMI   surface-3SG   black-black
    odo.
    become
    'When you cook in a kettle, its surface gets very black.'

7.6.4. Inchoative non-finite forms

Most non-finite verbs have analytic inchoative forms which indicate that the action denoted by the verb has just started or is about to start. Inchoative non-finite forms are built by means of the auxiliary *o-/e-, osi(-gi)-/esi(-gi)-* 'remain, become' (on this auxiliary see 17.1.3). The auxiliary is preceded by the corresponding non-finite form of the content verb, for example, a participle in (391a) and (391b) or the Infinitive in (391c). It may remain uninflected.

(391) a. *Ge*   *Boxo*   *tene*   *eme-i*   *osi*
           well   Boxo   CONT   come-PRP   become
           i:-zeŋe-ni.
           enter-FUT-3SG
           'Well, as soon as Boxo comes, he will enter.' (SKX 278)

      b. *Anana*   *sike*   *bi-ŋe:-i*   *maŋga*   *deu-i*
          earlier   young   be-IC-1SG   strong   get.tired-PRP
          osi   *ŋua-i*   *bi-s'e-i.*
          become   sleep-PRP   be-PERF-1SG
          'Earlier, when I was young, when I was very tired I used to sleep.'
          (SKX 222)

      c. *Min-e-we*   *galakta-na-mi*   *osi-gi*   *ei*
          me-0-ACC   seek-DIR-INF   become-REP   this
          sue   *kakt'a-zi-ni*   *min-e-we*
          whetstone   half-INST-3SG   me-0-ACC
          b'a-gi-ze-i.
          find-REP-SUBJ-2SG
          'If you will go to look for me, you will find me by this half of the whetstone.' (SKX 192).

7.7. Illustrative paradigms

This section presents illustrative paradigms of the following verbs: class I *jexe-* 'sing', *bu-* 'give'; class II *dian(a)-* 'say'; the auxiliary *bi-* 'be' and the negative auxiliary *e(i)*. For the verb *dian(a)-* the epenthetic vowel is shown in brackets when it is optional. If for a particular category not all verbs are cited, this means that the remaining verbs exhibit an analogous pattern. For example, the conjugation of the auxiliary *bi-* is often similar to that of the negative auxiliary. Impersonal verbal forms (impersonal forms of participles and infinitives, Irrealis Conditional Converbs), as well as analytic forms, are not presented here; see the corresponding sections.

General aspect
Present

1 SG	*jexe-mi*	*bu-mi*	*dian-a-mi*	*bi-mi*	*ei-mi*
2 SG	*jexe-i*	*bu-i*	*dian-a-i*	*bi:*	*ei*
3 SG	*jexe-ini*	*bu-ini*	*dian-a-ini*	*bi:-ni*	*e-ini*
1 PL EX	*jexe-u*	*bu:*	*dian-a-u*	*bi-u*	*e-u*
1 PL IN	*jexe-fi*	*bu-fi*	*dian-a-fi*	*bi-fi*	*ei-fi*
2 PL	*jexe-u*	*bu:*	*dian-a-u*	*bi-u*	*e-u*
3 PL	*jexe-iti*	*bu-iti*	*dian-a-iti*	*bi:-ti*	*e-iti*

Past

1 SG	*jexe:-mi*	*bu-o:-mi*	*diaŋ-ki-mi*	*e-si-mi*
2 SG	*jexe:-i*	*bu-o:-i*	*diaŋ-ki:*	*e-si:*
3 SG	*jexe:-ni*	*bu-o:-ni*	*diaŋ-ki-ni*	*e-si-ni*
1 PL EX	*jexe:-mu*	*bu-o:-mu*	*diaŋ-ki-mu*	*e-si-mu*
1 PL IN	*jexe:-fi*	*bu-o:-fi*	*diaŋ-ki-fi*	*e-si-fi*
2 PL	*jexe:-u*	*bu-o:-u*	*diaŋ-ki-u*	*e-si-u*
3 PL	*jexe:-ti*	*bu-o:-ti*	*diaŋ-ki-ti*	*e-si-ti*

Perfect

1 SG	*jex'e-i*	*bu-ge-i*	*diaŋ-ka-i*	*e-s'e-i*
2 SG	*jex'e-i*	*bu-ge-i*	*diaŋ-ka-i*	*e-s'e-i*
3 SG	*jex'e*	*bu-ge*	*diaŋ-ka*	*e-s'e*
1 PL EX	*jex'e-u*	*bu-ge-u*	*diaŋ-ka -u*	*e-s'e-u*
1 PL IN	*jex'e-ti*	*bu-ge-ti*	*diaŋ-ka-ti*	*e-s'e-ti*
2 PL	*jex'e-u*	*bu-ge-u*	*diaŋ-ka-u*	*e-s'e-u*
3 PL	*jex'e-du*	*bu-du-ge*	*diaŋ-ka-du*	*e-s'e-du*

Future

1 SG	*jexe-zeŋe-i*	*dian-(a)-zaŋa-i*	*e-zeŋe-i*
2 SG	*jexe-zeŋe-i*	*dian-(a)-zaŋa-i*	*e-zeŋe-i*
3 SG	*jexe-zeŋe-ni*	*dian-(a)-zaŋa-ni*	*e-zeŋe-ni*
1 PL EX	*jexe-zeŋe-u*	*dian-(a)-zaŋa-u*	*e-zeŋe-u*
1 PL PL	*jexe-zeŋe-fi*	*dian-(a)-zaŋa-fi*	*e-zeŋe-fi*
2 PL	*jexe-zeŋe-u*	*dian-(a)-zaŋa-u*	*e-zeŋe-u*
3 PL	*jexe-zeŋe-ti*	*dian-(a)-zaŋa-ti*	*e-zeŋe-ti*

Imperative

2 SG	*jexe-je*	*dian-a-ja*	*e-zi*
2 PL	*jexe-je-u*	*dian-a-ja-u*	*e-zi-u*

Conditional

1 SG	*jexe-muse-i*	*dian-a-muse-i*	*e-muse-i*
2 SG	*jexe-muse-i*	*dian-a-muse-i*	*e-muse-i*
3 SG	*jexe-muse*	*dian-a-muse*	*e-muse*
1 PL EX	*jexe-muse-u*	*dian-a-muse-u*	*e-muse-u*
1 PL IN	*jexe-muse-ti*	*dian-a-muse-ti*	*e-muse-ti*
2 PL	*jexe-muse-u*	*dian-a-muse-u*	*e-muse-u*
3 PL	*jexe-du-muse*	*dian-(a)-du-muse*	*e-du-muse*

Subjunctive

1 SG	*jexe-ze-mi*	*dian-(a)-za-mi*	*ata-mi*
2 SG	*jexe-ze-i*	*dian-(a)-za-i*	*ata-i*
3 SG	*jexe-ze*	*dian-(a)-za*	*ata*
1 PL EX	*jexe-ze-u*	*dian-(a)-za-u*	*ata-u*
1 PL IN	*jexe-ze-fi*	*dian-(a)-za-fi*	*ata-fi*
2 PL	*jexe-ze-u*	*dian-(a)-za-u*	*ata-u*
3 PL	*jexe-du-ze*	*dian-a-du-ze*	*ata-du*

Permissive

1 SG	*jexe-te-mi*	*dian-(a)-ta-mi*	*ata-mi*
2 SG	*jexe-te-i*	*dian-(a)-ta-i*	*ata-i*
3 SG	*jexe-te*	*dian-(a)-ta*	*ata*
1 PL EX	*jexe-te-u*	*dian-(a)-ta-u*	*ata-u*
1 PL IN	*jexe-te-fi*	*dian-(a)-ta-fi*	*ata-fi*
2 PL	*jexe-te-u*	*dian-(a)-ta-u*	*ata-u*
3 PL	*exe-te-du*	*dian-(a)-ta-du*	*ata-du*

Participles

Active participles
Present tense
Personal forms (Nominative)

SS

SG	*jexe-i*	*dian-a-i*	*bi:*	*e-i*
PL	*jexe-i-fi*	*dian-a-i-fi*	*bi:-fi*	*e-i-fi*

DS

1 SG	*jexe-i*	*dian-a-i*	*bi:*	*e-i*
2 SG	*jexe-i*	*dian-a-i*	*bi:*	*e-i*
3 SG	*jexe-i-ni*	*dian-a-i-ni*	*bi:-ni*	*e-i-ni*
1 PL IN	*jexe-i-fi*	*dian-a-i-fi*	*bi:-fi*	*e-i-fi*
1 PL EX	*jexe-u*	*dian-a-u*	*bi:-u*	*e-i-u*
2 PL	*jexe-u*	*dian-a-u*	*bi:-u*	*e-i-u*
3 PL	*jexe-i-ti*	*dian-a-i-ti*	*bi:-ti*	*e-i-ti*

An example of the case paradigm (the verb *bu-* 'give'):

	1, 2 SG	3 SG
ACC	*bu-i-we-i*	*bu-i-we-ni*
DAT	*bu-i-di:*	*bu-i-di-ni*
ALL	*bu-i-tigi:*	*bu-i-tigi-ni*
LOC	*bu-i-le-i*	*bu-i-le-ni*
ABL	*bu-i-digi:*	*bu-i-digi-ni*
PROL	*bu-i-li:*	*bu-i-li-ni*
INST	*bu-i-zi:*	*bu-i-zi-ni*

	1 PL IN	I PL EX, 2PL
ACC	*bu-i-we-fi*	*bu-i-we-u*
DAT	*bu-i-di-fi*	*bu-i-du:*
ALL	*bu-i-tigi-fi*	*bu-i-tigi-u*
LOC	*bu-i-le-fi*	*bu-i-le-u*
ABL	*bu-i-digi-fi*	*bu-i-digi-u*
PROL	*bu-i-li-fi*	*bu-i-li-u*
INST	*bu-i-zi-fi*	*bu-i-zi-u*

	3 PL	SS PL	SS SG
ACC	*bu-i-we-ti*	*bu-i-fi*	*bu-i*
DAT	*bu-i-di-ti*	*bu-i-di-fi*	*bu-i-di:*
ALL	*bu-i-tigi-ti*	*bu-i-tigi-fi*	*bu-i-tigi:*
LOC	*bu-i-le-ti*	*bu-i-le-fi*	*bu-i-le-i*
ABL	*bu-i-digi-ti*	*bu-i-digi-fi*	*bu-i-digi:*
PROL	*bu-i-li-ti*	*bu-i-li-fi*	*bu-i-li:*
INST	*bu-i-zi-ti*	*bu-i-zi-fi*	*bu-i-zi:*

Past Participle
Personal forms (Nominative)

SS

SG	*jexe:-mi*	*bu-o:-mi*	*diaŋ-ki-mi*	*e-si-mi*
PL	*jexe:-fi*	*bu-o:-fi*	*diaŋ-ki-fi*	*e-si-fi*

DS

1 SG	*jexe:-mi*	*bu-o:-mi*	*diaŋ-ki-mi*	*e-si-mi*
2 SG	*jexe:-i*	*bu-o:-i*	*diaŋ-ki-i*	*e-si:*
3 SG	*jexe:-ni*	*bu-o:-ni*	*diaŋ-ki-ni*	*e-si-ni*
1 PL IN	*jexe:-fi*	*bu-o:-fi*	*diaŋ-ki-fi*	*e-si-fi*
1 PL EX	*jexe:-mu*	*bu-o:-mu*	*diaŋ-ki-mu*	*e-si-mu*
2 PL	*jexe:-u*	*bu-o:-u*	*diaŋ-ki-u*	*e-si-u*
3 PL	*jexe:-ti*	*bu-o:-ti*	*diaŋ-ki-ti*	*e-si-ti*

An example of the paradigm (the verb *bu:-* 'give'):

	1, 2 SG	3 SG	1 PL IN
ACC	*bu-o:-me-i*	*bu-o:-me-ni*	*bu-o:-me-fi*
DAT	*bu-on-di:*	*bu-on-di-ni*	*bu-on-di-fi*
ALL	*bu-on-tigi:*	*bu-on-tigi-ni*	*bu-on-tigi-fi*
LOC	*bu-on-dile-i*	*bu-on-dile-ni*	*bu-on-dile-fi*
ABL	*bu-on-digi:*	*bu-on-digi-ni*	*bu-on-digi-fi*
PROL	*bu-on-dili:*	*bu-on-dili-ni*	*bu-on-dili-fi*
INST	*bu-on-zi:*	*bu-on-zi-ni*	*bu-on-zi-fi*

	1 PL EX, 2PL	3 PL
ACC	*bu-o:-me-u*	*bu-o:-me-ti*
DAT	*bu-on-du:*	*bu-on-di-ti*
ALL	*bu-on-tigi-u*	*bu-on-tigi-ti*
LOC	*bu-on-dile-u*	*bu-on-dile-ti*
ABL	*bu-on-digi-u*	*bu-on-digi-ti*
PROL	*bu-on-dili-u*	*bu-on-dili-ti*
INST	*bu-on-zi-u*	*bu-on-zi-ti*

	SS PL	SS SG
ACC	*bu-o:-fi*	*bu-o:-i*
DAT	*bu-on-di-fi*	*bu-on-di:*
ALL	*bu-on-tigi-fi*	*bu-on-tigi:*
LOC	*bu-on-dile-fi*	*bu-on-dile-i*
ABL	*bu-on-digi-fi*	*bu-on-digi:*
PROL	*bu-on-dili-fi*	*bu-on-dili:*
INST	*bu-on-zi-fi*	*bu-on-zi:*

Future Participle
Personal forms (Nominative)

SS

SG	*jexe-zeŋe-i*	*dian-(a)-zaŋa-i*	*e-zeŋe-i*
PL	*jexe-zeŋe-fi*	*dian-(a)-zaŋa-fi*	*e-zeŋe-fi*

DS

1 SG	*jexe-zeŋe-i*	*dian-(a)-zaŋa-i*	*e-zeŋe-i*
2 SG	*jexe-zeŋe-i*	*dian-(a)-zaŋa-i*	*e-zeŋe-i*
3 SG	*jexe-zeŋe-ni*	*dian-(a)-zaŋa-ni*	*e-zeŋe-ni*
1 PL IN	*jexe-zeŋe-fi*	*dian-(a)-zaŋa-fi*	*e-zeŋe-fi*
1 PL EX	*jexe-zeŋe-u*	*dian-(a)-zaŋa-u*	*e-zeŋe-u*
2 PL	*jexe-zeŋe-u*	*dian-(a)-zaŋa-u*	*e-zeŋe-u*
3 PL	*jexe-zeŋe-ti*	*dian-(a)-zaŋa-ti*	*e-zeŋe-ti*

An example of the case paradigm (the verb *bu:-* 'give'):

	1,2 SG	3 SG
ACC	*bu-zeŋe-we-i*	*bu-zeŋe-we-ni*
DAT	*bu-zeŋe-di:*	*bu-zeŋe-di-ni*
ALL	*bu-zeŋe-tigi:*	*bu-zeŋe-tigi-ni*
LOC	*bu-zeŋe-le-i*	*bu-zeŋe-le-ni*
ABL	*bu-zeŋe-digi:*	*bu-zeŋe-digi-ni*
PROL	*bu-zeŋe-li:*	*bu-zeŋe-li-ni*
INST	*bu-zeŋe-zi:*	*bu-zeŋe-zi-ni*

	1PL IN	2PL, 1PL EX
ACC	*bu-zeŋe-we-fi*	*bu-zeŋe-we-u*
DAT	*bu-zeŋe-di-fi*	*bu-zeŋe-du:*
ALL	*bu-zeŋe-tigi-fi*	*bu-zeŋe-tigi-u*
LOC	*bu-zeŋe-le-fi*	*bu-zeŋe-le-u*
ABL	*bu-zeŋe-digi-fi*	*bu-zeŋe-digi-u*
PROL	*bu-zeŋe-li-fi*	*bu-zeŋe-li-u*
INST	*bu-zeŋe-zi-fi*	*bu-zeŋe-zi-u*

	3PL	SS PL	SS SG
ACC	*bu-zeŋe-we-ti*	*bu-zeŋe-fi*	*bu-zeŋe-i*
DAT	*bu-zeŋe-di-ti*	*bu-zeŋe-di-fi*	*bu-zeŋe-di:*
ALL	*bu-zeŋe-tigi-ti*	*bu-zeŋe-tigi-fi*	*bu-zeŋe-tigi:*
LOC	*bu-zeŋe-le-ti*	*bu-zeŋe-le-fi*	*bu-zeŋe-le-i*
ABL	*bu-zeŋe-digi-ti*	*bu-zeŋe-digi-fi*	*bu-zeŋe-digi:*
PROL	*bu-zeŋe-li-ti*	*bu-zeŋe-li-fi*	*bu-zeŋe-li:*
INST	*bu-zeŋe-zi-ti*	*bu-zeŋe-zi-fi*	*bu-zeŋe-zi:*

Purposive Converb

SS

SG	*jexe-lege-mi*	*dian-a-laga-mi*	*e-lege-mi*
PL	*jexe-lege-fi*	*dian-a-laga-fi*	*e-lege-fi*

DS

1 SG	*jexe-lege-i*	*dian-a-laga-i*	*e-lege-i*
2 SG	*jexe-lege-i*	*dian-a-laga-i*	*e-lege-i*
3 SG	*jexe-lege-ni*	*dian-a-laga-ni*	*e-lege-ni*
1 PL IN	*jexe-lege-fi*	*dian-a-laga-fi*	*e-lege-fi*
1 PL EX	*jexe-lege-u*	*dian-a-laga-u*	*e-lege-u*
2 PL	*jexe-lege-u*	*dian-a-laga-u*	*e-lege-u*
3 PL	*jexe-lege-ti*	*dian-a-laga-ti*	*e-lege-ti*

Imperfective Converb

SS

SG	*jexe-ŋie-i*	*dia-ŋie-i*
PL	*jexe-ŋie-fi*	*dia-ŋie-fi*

DS

1 SG	*jexe-ŋie-i*	*dia-ŋie-i*
2 SG	*jexe-ŋie-i*	*dia-ŋie-i*
3 SG	*jexe-ŋie-ni*	*dia-ŋie-ni*
1 PL IN	*jexe-ŋie-fi*	*dia-ŋie-fi*
1 PL EX	*jexe-ŋie-u*	*dia-ŋie-u*
2 PL	*jexe-ŋie-u*	*dia-ŋie-u*
3 PL	*jexe-ŋie-ti*	*dia-ŋie-ti*

Perfective Converb

SS

SG	jex'e-si	bu-ge-si	diaŋ-ka-si	bi-s'e-si
	e-s'e-li			
PL	jexe-du-ge-si	bu-du-ge-si	dian-a-du-ge-si	bi-du-ge-si
	e-du-ge-si			

DS

1 SG	jexe-isi	dian-a-isi	bi:-si	e-isi
2 SG	jexe-isi	dian-a-isi	bi:-si	e-isi
3 SG	jexe-isi-ni	dian-a-isi-ni	bi:-si-ni	e-isi-ni
1 PL IN	jexe-isi-fi	dian-a-isi-fi	bi:-si-fi	e-isi-fi
1 PL EX	jexe-isi-u	dian-a-isi-u	bi:-si-u	e-isi-u
2 PL	jexe-isi-u	dian-a-isi-u	bi:-si-u	e-isi-u
3 PL	jexe-isi-ti	dian-a-isi-ti	bi:-si-ti	e-isi-ti

Conditional Converb

SS

SG	jexe-li	dian-a-li	e-li
PL	jexe-lie	dian-a-lie	e-lie

DS

1 SG	jexe-lisi:	dian-a-lisi:	e-lisi:
2 SG	jexe-lisi:	dian-a-lisi:	e-lisi:
3 SG	jexe-lisi-ni	dian-a-lisi-ni	e-lisi-ni
1 PL IN	jexe-lisi-fi	dian-a-lisi-fi	e-lisi-fi
1 PL EX	jexe-lisi-u	dian-a-lisi-u	e-lisi-u
2 PL	jexe-lisi-u	dian-a-lisi-u	e-lisi-u
3 PL	jexe-lisi-ti	dian-a-lisi-ti	e-lisi-ti

7.8. Functions of the Indicative tense/aspect categories

Outside declarative sentences, the Indicative forms function in interrogative sentences (23.1).

7.8.1. General aspect

The term "general aspect" is conventional. It is applied here to all verbal finite forms other than those characterized as Habitual or Progressive. It therefore embraces forms with a perfective and imperfective meaning.

7.8.1.1. Present

The Present tense can be formed from all verbs with the exception of experiential verbs in *-sA-* (8.2.2.10) and intensive verbs in *-ki-*, *-kA-* (8.2.2.11.2) which, due to their semantics, occur only in one of the past tenses.

7.8.1.1.1. Progressive meaning

Although the Habitual and Progressive are grammaticized in separate categories, the Present tense of the general aspect is used in both these functions. In fact, in both imperfective functions (the habitual and progressive), the Present is preferred to the specialized aspectual forms, the latter only being used if it is especially important to emphasize the aspectual meaning. Note also that telic verbs do not have Progressive forms (see 7.7.3) while the Present tense is possible for virtually all semantic types of verbs.

The Present refers to actions in progress at the moment of speaking. In addition, it expresses states that obtain at the moment of speech, when the progressive character is not necessarily specified.

(392) a. *Wasia* *mä:usa-wa* *zawa-ini.*
   Vasya gun-ACC take-3SG
   'Vasya is taking/takes the gun.'

  b. *Eigaŋkini* *bi* *eke-le*   *anči* *bi-mi.*
   now   me time-PART no be-1SG
   'I do not have time now.'

7.8.1.1.2. Habitual meaning

The Present may be used to express generalized situations without any specific time reference, cf.:

(393) a. *Zikte*   *zei* *limonika* *züj.*
   blueberry sweet schizandra sour
   'Blueberry is sweet, schizandra (a local creeper) berries are sour.'

  b. *Taŋi:-ni* *aja-zi.*
   read-3SG good-INST
   'He reads well.'

7.8.1.1.3. *Praesens historicum*

The Present is used in narratives with both perfective and imperfective meaning. Cf. (394) taken from folklore texts.

(394) a. *Nua-ti*   *ŋene-iti*   *ba:-za*   *ge-li-ni*
        he-3PL   walk-3PL   place-N   surface-PROL-3SG
        tuge-zi   *tukä:i-ti*   *in'ei-ziga*   *tuxi-we*
        quick-INST   run-3PL   dog-PL   sledge-ACC
        uŋkäla-iti.
        carry-3PL
        Pakula   *tuxi*   *kä:-la-ni*   *tukä-ini,*
        Pakula   sledge   side-LOC-3SG   run-3SG
        in'ei-ziga-wa   *kaja-ini.*   *Si*   *Säŋa-da tuxi-le*
        dog-ACC   drive-3SG   Si   San-FOC sledge-LOC
        ŋua-ini.
        sleep-3SG
        'They are walking quickly in the forest. The dogs are running, carrying the sledge. Pakula is running by the sledge, driving on the dogs. And Si San is sleeping on the sledge.'

    b. *Ti:*   *emne-de*   *exe-ne-ni*   *sa-ili.*
        that   once-FOC   sister-PL-3SG   know-3SG
        'So one day her sisters learnt (about this).'

    c. *Uti*   *pečka-tigi*   *wende-le-mi*   *susa-kta-ili.*
        that   oven-LAT   throw-SING-INF   escape-DIS-3SG
        'Having thrown (it) into the oven, they escaped.'

7.8.1.2. Past

7.8.1.2.1. Perfective meaning

The Past tense is the usual way to refer to time anterior to the moment of speech. Most commonly it refers to a perfective event in the past (395) or expresses a sequence of consecutive perfective actions in the past (396).

(395) a. *Ni*   *bu-o:-ni*   *ei*   *kusige-we sin-du?*
        who   give-PAST-3SG   this   knife-ACC you-DAT
        'Who gave you this knife?'

    b. *Nina-de*   *emegi-e-ni.*
        Nina-FOC   come-PAST-3SG
        'Even Nina came.'

(396) *Zogbo-i*   *zawa-mie*   *zoŋcile:-ni,*   *d'ofo*
       harpoon-REF   take-INF   throw.PAST-3SG   immediately
       nagda:-ni.
       reach.PAST-3SG
       'After having taken out the harpoon, he threw it, and reached (the target) immediately.'

7.8.1.2.2. Imperfective meaning

The Past may also refer to an imperfective situation that obtains prior to the moment of speech.

(397) a.   *Nua-ni*   *sokto:-ni.*
           he-3SG   drink.PAST-3SG
           'He was drinking.'
      b.   *Dogbo*   *iŋeni*   *uŋkäla:-ni.*
           night   day   carry.PAST-3SG
           'He was carrying (them) for days and nights.' (K 170)

7.8.1.3. Perfect

The Perfect is used to express an individual actualized situation in the past.

7.8.1.3.1. Resultative meaning

The main function of the Perfect is to refer to a perfective event in the past. It therefore combines a time reference with an aspectual meaning. Like the Perfect in a number of other languages, the Udihe Perfect in this function triggers the implication of result, that is, the relevance of the past situation at the moment of speech (as opposed to the Past tense). Normally, only telic verbs are used in this function in the Perfect.

Clauses with the Perfect tend to be short. Typically they do not include any constituents other than the subject and the verb itself. This is probably related to the communicative function that is often associated with the verb in the Perfect. It tends to convey new (focus) information. With the assumption that each clause normally conveys one piece of new information, other non-verbal constituents are unlikely to co-occur with the focussed verb.

(398) a.   *Bi   emegi-ge-i.*
           me   come-PERF-1SG
           'I have come back.'
      b.   *Where is your gun?*
           Nod'o-i.
           lose.PERF-1SG
           'I have lost it.'
      c.   *In'ei-ziga*   *susa-du-ge.*
           dog-PL   escape-PL-PERF
           'The dogs have escaped.'

d. *Ge   zugdi   ise-pte-li-ge.*
   here   house   see-DEC-INC-PERF
   'Here it is, the house has appeared.'

e. *Akandi   ilaktaŋ-ka   gune.*
   Akandi   appear-PERF   EV
   '(He sees:) here has appeared Akandi.' (K 121)

Often the resultative Perfect adds the semantic element 'already' to the description of the situation in the past, since a separate lexeme meaning 'already' does not exist in Udihe.

(399) a. *Bring some water.*

   Bi   gaŋna-s'a-i.
   me   bring-EXP-PERF-1SG
   'I have (already) brought it.'

   b. *Don't repeat it.*

   Bi   egzegi-ge-i.
   me   understand-PERF-1SG
   'I have (already) understood it.'

The Perfect verbs do not usually co-occur with definite time adverbials and with iterative adverbials. However, they are compatible with indefinite time adverbials and particles that characterize action from the aspectual point of view, and are also likely to signalize the focus function of the verb, such as *ketige* 'almost', *ei* 'just', and *eifili* 'more, again'.

(400) a. *Nua-ni   ketige   tiŋmel'e.*
      he-3SG   almost   fell.PERF
      'He has almost fallen down.'

   b. *Bi   ei   diaŋ-ka-i*
      me   just   say-PERF-1SG
      'I have just said it.'

   c. *Eifili   em'e,   eifili   em'e*
      more   come.PERF   more   come.PERF
      'He came (once) and then came again.'

7.8.1.3.2. Perfect in yes-no questions

Close to the resultative function is the use of the Perfect in yes-no questions which refer to the situation in the past, whereas in *wh*-questions about an event in the past it is typically the Past tense that is used. In such an utterance the focus domain extends over the verb alone.

(401) a. *Sergei   mamasa-l'a?*
    Sergei   wife-V.PERF
    'Has Sergei married?'

    b. *Iwana   sin-du   kusige-we bu-ge*
       Ivan   you-DAT   knife-ACC give-PERF
       e-si-ni   bu-o:-s(i)?
       NEG-PAST-3SG   give-PAST-DIS
       'Has Ivan given the knife to you or not?'

    c. *Si diaŋ-ka-i   eniŋe-tigi: min-zi*
       you say-PERF-2SG   mother-LAT.REF   we-INST
       geje   ŋene-lege-mi   ba:-za
       with   walk-PURP-SS   place-N
       ge-tigi-ni?
       surface-LAT-3SG
       'Have you said to your mother that you would go to the forest with us?'

7.8.1.3.3. "Hot news" meaning

The Perfect can also be used in a "hot news" situation, or to report on an unexpected event (402). Compare (403a), produced in a situation when the speaker comes from outside and announces the news, with (403b) where the regular Past is used, which rather has a narrative or "descriptive" character.

(402) a. *Exe   seuni: seuni: xuli-s'e.*
       sister   awful   awful   come-EXP.PERF
       'Sister, an awful awful one has come.'(K 105)

    b. *ŋua-gi-si:-ti,   dogbo j'eu-dele   komokto*
       sleep-REP-IM-3PL   night what-IND   bell
       jaida-li-ge.
       ring-INC-PERF
       'They were sleeping again, and (suddenly) in the night a bell started ringing.' (K182)

(403) a. *Tigde-li-ge   ba:-la!*
       rain-INC-PERF   place-LOC
       'It has started raining outside!'

    b. *Ba:-la   tigde-li-e-ni.*
       place-LOC   rain-INC-PAST-3SG
       'It started raining.'

However, the regular Past is not totally ruled out in the "hot news" situation either.

(404) *Ag'a-i,*   *minti-le*   *eme:-ni*   *omo*
     brother-1SG   we-LOC   come.PAST-3SG   one
     od'o-ko.
     old.man-N
     'Brother, an old man has come to us.' (K 170)

7.8.1.3.4. Experiential meaning

In its experiential function the Perfect expresses the notion that an event occurred at least once prior to the moment of speech. This case applies not only to telic but also to atelic verbs. Verbs with the experiential suffix *-sA-* are often found in the Perfect (see 8.2.2.10), but this is not necessarily so, as (405) illustrates.

(405) *Nua-ti*   *e-s'e*   *etete-du*
     he-3SG   NEG.PERF   work-PL
     'They haven't (ever) worked.'

7.8.1.4. Future

The Future tense can be formed from virtually all verbs except desiderative verbs in *-mu:i-* (8.2.3.1). The Future refers to situations that are in the future with respect to the moment of speech, both perfective (406) and imperfective (407). It may imply various modal nuances, such as promise, necessity, potentiality, and the like.

(406) *Ña*   *kumte-lisi-u*   *nua-ni*   *sun-a-wa*
     again turn.over-CC-2PL   he-3SG   you.PL-O-ACC
     dukte-zeɲe-ni.
     beat-FUT-3SG
     'If you turn over again, he will beat you up.'

(407) a. *Caixi*   *ɲene-zeɲe-fi.*
         further   walk-FUT-1PL.IN
         'We will walk further.'
     b. *Ketu*   *zei*   *t'ala*   *bi-zeɲe-ni.*
         very   tasty   food   be-FUT-3SG
         'It will be a very tasty meal (made of raw fish).'
     c. *Ñ'aula-ziga soɲo-zoɲo-ti.*
         child-PL   cry-FUT-3PL
         'The children will cry.'

7.8.1.5. Pluperfect

The Pluperfect is an absolute-relative tense: it refers to situations in the remote past, and also expresses temporal precedence to another past situation.

7.8.1.5.1. Remote past

The first meaning can be present on its own, as in the examples below. In this case the Pluperfect refers to an isolated perfective or imperfective situation in the remote past, normally with the implication that this situation does not obtain anymore.

(408) a. *Anana*   *uti*   *ni:*   *min-e-we*   *koŋko:-ni*
          long.ago   this   man   me-0-ACC   beat.PP-3SG
          bi-s'e.
          be-PERF
          'A long time ago this man beat me.'

     b. *Anana*   *xuda-wa-fi*   *niŋka-du*
          long.ago   fur-ACC-REF   Chinese-DAT
          xuda-si-e-mu   *bi-s'e.*
          fur-V-PP-1EX be-PERF
          'A long time ago we used to sell fur to the Chinese people.'

     c. *Bi*   *ñ'aula*   *bi-ŋie-i*   *xoŋto*   *ñ'aula-ziga*
          me   child   be-IC-1SG   other   child-PL
          min-e-we   *koŋko:-ti*   *bi-s'e.*
          me-0-ACC   beat.PP-3PL   be-PERF
          'When I was a child, the other children beat me.'

     d. *Anana*   *nua-ni* *egdi-me*   *umi-e-ni*
          long.ago   he-3SG   much-ACC   drink-PP-3SG
          bi-s'e.
          be-PERF
          'A long time ago he used to drink a great deal.'

     e. *Anana*   *wakca-na-mi*   *in'ei-we*
          long.ago   hunt-DEST-INF   dog-ACC
          alau-ge-si   *xuli-e-u*   *bi-s'e.*
          harness-PERF-PC.SS   go-PP-1PL.EX   be-PERF
          'A long time ago we used to go hunting, after having harnessed the dogs.'

7.8.1.5.2. Anteriority in the past

Temporal precedence to another past event is illustrated below. In narratives, the Pluperfect is used to refer to an event prior to the main story line. In this case the Pluperfect typically refers to the perfective situation (409a-b), but the imperfective situation is also possible (409c).

(409) a. *Iwana*   *eme-gi:-si-ni*   *bi*   *tene*
          Ivan   come-REP-PC-3SG   me   CONT
          diga-mi   *metu-o:*   *bi-s'e-i.*
          eat-INF   finish-PP   be-PERF-1SG
          'When John came, I had just finished eating.'

      b. *Nua-ni*   *tagda:-ni*   *bi*   *moxo-wo*
          he-3SG   curse.PAST-3SG   me   cup-ACC
          camna: *bi-si-mi.*
          break.PP   be-PAST-1SG
          'He cursed me because I had broken the cup.'

      c. *Eniŋe*   *eme-gi-e-ni*   *zulie-ni*   *zube*   *časa*
          mother   come-REP-PP-3SG   before-3SG   two   hour
          ŋua: *bi-s'e*   *sita-ni.*
          sleep.PP   be-PERF   son-3SG
          'Before the mother came, her son had slept for two hours.'

In this function, the Pluperfect is normally used in indirect speech, if the speech verb refers to the past, cf.:

(410) a. *Ñ'ädiga*   *muisi-e-ni*   *si*   *nuan-di-ni*
          Nadiga   think-PAST-3SG   you   he-DAT-3SG
          kesi-we   *bu-o:*   *bi-s'e-i*   *gumu.*
          luck- ACC   give-PP   be-PERF-2SG   EV
          'Nadiga thought you had brought (good) luck for him.'

      b. *Bi*   *xaundasi-e-mi*   *si*   *j'e-we*   *b'a*
          me   ask-PAST-1SG   you   what-ACC   find-PP
          bi-s'e-i
          be-PERF-2SG
          'I asked what you had found.'

7.8.2. Habitual aspect

The Habitual aspect expresses an action which is regularly or consistently performed, and can be viewed as a characteristic of a certain period of time, rather than an accidental situation. The Habitual situation is possible in the

present, past, and future. Although the habitual forms are in principle available for atelic verbs, they are rather infrequent in this use.

7.8.2.1. The Present Habitual

7.8.2.1.1. Habitual meaning

The Present Habitual refers to a general timeless situation rather than the moment of speech. It expresses an action not localized in time. Thus, in answer to the question (411)

(411) *Nua-ni   j'e-we   nixe-ini?*
      he-3SG   what-ACC   do-3SG
      'What is she doing (now)?'

the Habitual is not acceptable, as illustrated in (412a). Only the Present tense of the general (412b) or Progressive (412c) aspect can be used:

(412) a.   **Čaja-wa   umi:.*
           tea-ACC   drink.PRP
           'She is drinking tea.'
      b.   *Čaja-wa   umi:-ni.*
           tea-ACC   drink-3SG
           'She is drinking tea.'
      c.   *Čaja-wa   umi-mi.*
           tea-ACC   drink-INF
           'She is drinking tea.'

The examples below illustrate the use of the Present Habitual.

(413) a.   *Lusa   j'eu-j'eu   xebu-i.*
           Russian   what-what   bring-PRP
           'Russians (usually) bring everything.'
      b.   *Umi-du-ge-si*   *jexe-du*   *nua-ti.*
           drink-PL-PERF-PC.SS   sing-PL.PRP   he-3PL
           'After having drunk they (usually) sing.'
      c.   *Nua-ti   dian-a-iti   o-du*   *soŋgo   bagdi:*
           he-3PL   say-0-3PL   this-DAT   bear   live.PRP
           guni:-ti.
           say-3PL
           'They say that a bear lives here.'

d. *Ni-de*   *eme-mi*   *min-e-we*   *bele-du.*
    who-IND   come-INF   me-0-ACC   help-PL.PRP
    'Whoever comes helps me.'

e. *Nua-ni*   *c'o*   *aja-zi*   *uli:.*
    he-3SG   very   good-INST   sew.PRP
    'She sews very well.'

f. *Ni*   *dexemi*   *sa:-du.*
    Who   IND   know-PL.PRP
    'Everybody knows (it).'

7.8.2.1.2. Progressive meaning

The Udihe Habitual in the Present tense can sometimes have a progressive meaning. Only atelic verbs are compatible with this use. The verb is normally repeated twice to express the intensity and the repeated character of the action.

(414) a. *Bi tukä:-i*   *tukä:-i.*
        me run-PRP   run-PRP
        'I am running, running.'

     b. *Te:-i*   *te:-i*   *ni:-de*   *ei*   *eme.*
        sit-PRP   sit-PRP   who-IND   NEG   come
        'He is sitting, sitting, nobody comes.'

     c. *Utemi-de*   *geun-de-i*   *geun-de-i.*
        so-FOC   pole-V-PRP   pole-V-PRP
        'So he is pushing with his pole, pushing.'

7.8.2.2. The Past and Future Habitual

In the Past Habitual the verb often co-occurs with iterative adverbials such as *anana* 'long ago, before, previously', *tutulu* 'always', and *mendele* 'often'.

(415) a. *Bi*   *anana*   *aja-zi*   *ŋua-i*   *bi-s'e-i.*
        me long.ago   good-INST   sleep-PRP   be-PERF-1SG
        'A long time ago I used to sleep well.'

     b. *Anana*   *udie*   *keje-zi-ni*   *dian-a-i*
        long.ago   Udihe   language-INST-3SG   say-0-PRP
        bi-s'e.
        be-PERF
        'A long time ago he used to speak Udihe.'

c. | *Bi* | *ñ'aula* | *bi-ŋie-i* | *bi* | *mafa-i* |
   |---|---|---|---|---|
   | me | child | be-IC-1SG | me | husband-1SG |

mendele	*koŋko-i*	*bi-s'e*	*min-e-we.*
often	beat-PRP	be-PERF	me-0-ACC

   'When I was young, my husband often beat me.'

d. | *Niŋka* | *xuda-wa* | *gada-mi* | *zä:-wa* | *aja* |
   |---|---|---|---|---|
   | Chinese | fur-ACC | buy-INF | money-ACC | good |

bu:-i	*bi-s'e.*
give-PRP	be-PERF

   'When buying the fur, the Chinese people used to pay well.'

e. | *Anana* | *ketu* | *sebzeŋke-zi* | *imasi-du* |
   |---|---|---|---|
   | long.ago | very | interesting-INST | tell-PL |

bi-s'e.
be-PERF

   'A long time ago they used to tell tales in a very interesting way.'

An example of the progressive meaning in the past is (416). When the content verb bears the Inchoative suffix *-li* the construction expresses the intention to perform the corresponding action, cf. (416b) and (416c).

(416) a. | *Mafa-ni* | *tene* | *z'e* | *ogbö* | *wa:-mi* |
      |---|---|---|---|---|
      | man-3SG | CONT | soon | elk | kill-INF |

si:-ni	*bi-si-ni.*
skin-3SG	be-PAST-3SG

      'Her husband, having then killed an elk, was skinning it.'

   b. | *Bi* | *ŋua-li:* | *bi-s'e-i.* |
      |---|---|---|
      | me | sleep-INC.PRP | be-PERF-1SG |

      'I was sleepy.'

   c. | *Nua-ni* | *jexe-li:* | *bi-si-ni.* |
      |---|---|---|
      | he-3SG | sing-INC.PRP | be-PAST-3SG |

      'He felt like singing.'

An example of the Future Habitual is:

(417) | *Nua-ni* | *udie* | *keje-zi-ni* | *aja-zi* |
      |---|---|---|---|
      | he-3SG | Udihe | language-INST-3SG | good-INST |

dian-a-i	*bi-zeŋe-ni.*
say-0-PRP	be-FUT-3SG

      'He will speak Udihe well.'

7.8.2.3. Habitual copula

The Habitual impersonal copula *bie* (Present tense) and *bi-s'e* (Past tense) is largely used in existential copular constructions where it can be translated as 'there is/there are' (cf. French *il y a*, German *es gibt*). On these constructions see Chapter 17, especially 17.1.2. It is also found within the analytical verbal forms, such as the Habitual (7.4.2), Pluperfect (7.4.1.5), Necessitative (7.5.3), and Progressive (7.4.3). In this use it has lost its aspectual value and is completely synonymous with the Past tense copula.

7.8.3. Progressive aspect

The Progressive expresses a process in progress at the time of reference: present, past, or future. Crucially, it indicates that the speaker or the main character of the text must witness the situation in person. Thus, the meaning of the Progressive is something like '(I/he see/witness/catch) him doing'. So the Progressive implies a certain unity of time and place between the referred situation and the situation of speech. This semantic component differentiates between the Present Progressive and the progressive use of the regular or Habitual Present. Cf. (418a) in which the Progressive is used in a situation when the speaker has returned home and witnessed the situation he describes, and (418b) which is produced when he is outside his home.

(418) a. *Bi   xunazi: tege-we   wo:-mi   bi:-ni.*
            me   sister.1SG   gown-ACC   make-INF   be-3SG
            'My sister is making a gown.'

       b. *Bi   xunazi: wo:-i   bi:-ni.*
            me   sister.1SG   make-PRP   be-3SG
            'My sister is sewing.'

Examples (419) illustrate the Present Progressive, examples (420) the Past Progressive, examples (421) the Future Progressive.

(419) a. *Nua-ni   eme-isi-ni   bi   oño-mi   bi-mi.*
            he-3SG   come-PC-3SG   me   write-INF   be-1SG
            'When he comes I am writing.'

       b. *Tukti-mi   tukti-mi.*
            climb-INF   climb-INF
            'He is climbing, climbing.'

       c. *Nada   ñeŋue   eme-i-we-ni   duisi-mi bi-mi.*
            seven   ogre   come-PRP-ACC-3SG   hear-INF be-1SG
            'I hear that seven ogres are coming.' (K 115)

d Anda-tigi: dieli-e-ni   dieli-e-ni
   friend-LAT.REF   fly-PAST-3SG   fly-PAST-3SG
   ŋene:-ni   anda-ni   zugdi   bi-mi
   come.PAST-3SG   friend-3SG   at.home   be-INF
   bie   gune.
   be.PRES.HAB   EV
   'He flew to his friend, he flew, he came, his friend is apparently at home.' (K 133)

(420) a. Bi   e-zeŋe-i   ŋene   gun-e-mi
          me   NEG-FUT-1SG   go   say-0-INF
          bi-s'e-i.
          be-PERF-1SG
          'I was saying: I won't go.'

      b. Nua-ti   wa:taŋi   oño-mi   bi-s'e.
          he-3PL   just   write-INF   be-PERF
          'They were just writing.'

      c. Bi   zugdi-tigi   igi-si: ma:ma-i
          me   house-LAT   enter-PC.1SG   grandmother-1SG
          čaja-wa   olokto-mi   bi-s'e.
          tea-ACC   cook-INF   be-PERF
          'When I entered the house, my grandmother had been making tea.'

      d. Iwana   eme:-ni   ekindi-ni   bi
          Ivan   come.PAST-3SG   during-3SG   me
          diga-mi   bi-si-mi.
          eat-INF   be-PAST-1SG
          'When Ivan came, I was eating.'

(421) Bi   eme-gi:-si: si   ŋua-mi   bi-zeŋe-i.
       me   come-REP-PC.1SG   you   sleep-INF   be-FUT-2SG
       'When I come back, you will be sleeping.'

7.9. Function of non-Indicative forms

Non-Indicative moods (Imperative, Subjunctive, Necessitative, Conditional, and Permissive) express different types of irrealis modalities. The meanings of the Subjunctive, Permissive, and, partly, the Imperative, often overlap.

7.9.1. Imperative

Null-argument verbs (14.1), desiderative verbs in *-mu:i-* (8.2.3.1), some modal verbs and psych-verbs (such as *nixe-* 'to be going to do something', *ča:la-*

'want'), and some one-argument verbs that express natural phenomena (for example, *mude-* 'come' (of water)) do not have the Imperative. In certain copular constructions (constructions expressing destination, desire, quantity, and experiential state, see Chapter 17) the verb 'be' cannot be used in the Imperative either.

The Imperative expresses the usual imperative nuances, such as order, request, command, etc. The hortative particle *-zA* serves to soften the tone of the request, as in (422c).

(422) a. *Baulima-wa*   *diga*
         corn-ACC   eat.IMP.2SG
         'Eat the corn.'

     b. *ŋene-je-u.*
         go-IMP-2PL
         'Go away!'

     c. *M'a*   *diga-i-za.*
         here   eat-IMP.2SG-HORT
         'Here it is, please, eat (it)!'

     d. *Min-du*   *ule:-we*   *xaulie*   *bu-je*
         me-DAT   meat-ACC   please   give-IMP.2SG
         'Please, give me some meat.'

In the prohibitive functions the negative forms of the Imperative are used.

(423) a. *E-zi*   *mudi.*
         NEG-IMP.2SG   mumble
         'Don't mumble.'

     b. *Ute*   *bede*   *e-zi-u*   *iñe-we-si.*
         that   like   NEG-IMP-2PL   laugh-CAUS-IM
         'Don't (PL) joke this way.'

Imperative verbs often take the Directive derivational suffix *-nA-* 'go and do something' (8.2.2.8), including the cases where the component 'go' is in fact redundant, cf.:

(424) *Jegdige,*   *guŋ-ki-ni,*   *dau-ne-je.*
       hero   say-PAST-3SG   carry.over-DIR-IMP.2SG
       'She said: hero, carry (us) over.' (K 107)

7.9.2. Subjunctive

The Subjunctive has a wide range of non-indicative meanings, which can very generally be characterized as unreality. On the use of the Subjunctive in dependent clauses see 18.3.1.2.

7.9.2.1. Exhortation

First, the Subjunctive expresses exhortations, in which case the verb takes any person and number forms, including the 1ˢᵗ person Singular (425), the 1ˢᵗ person Plural (426), and the 3ʳᵈ person (427).

(425) a. *Bi   jexe-ze-mi.*
        me   sing-SUBJ-1SG
        'Let me sing.'

      b. *Bi   molo-zo-mi.*
        me   fetch.wood-SUBJ-1SG
        'Let me fetch the wood.'

      c. *Bi   teluŋu-si-ze-mi.*
        me   story-V-SUBJ-1SG
        'Let me tell.'

(426) a. *Kawa-tigi   neu-gi-ze-fi.*
        tent-LAT   take-REP-SUBJ-1PL.IN
        'Let us take (it) back to the tent.'

      b. *ŋene-ze-fi   amäixi.*
        go-SUBJ-1PL.IN   back
        'Let us go back.'

(427)   *Ei   ni: wakca-za.*
        this man   hunt-PERM
        'Let this man hunt.'

In the 2ⁿᵈ person the Subjunctive forms in this function express a less categorical imperative than the Imperative mood.

(428) a. *Min-du   konfeta-wa   gada-za-i.*
        me-DAT   candy-ACC   buy-SUBJ-2SG
        'What if you buy me some candy?'

      b. *Mama,   xele-ze-i,   guŋ-ki-ni.*
        grandmother   hurry.up-SUBJ-2SG   say-PAST-3SG
        'She said: grandmother, please, hurry up.' (K 107)

The 2nd person Subjunctive forms are traditionally used in conjuration. The following example is a magical address to an arrow:

(429) *Ni:*   *bi:-si-ni*   *nagda-za-i*   *mo:*   *bi:-si-ni*
      man be-PC-3SG   reach-SUBJ-2SG   tree be-PC-3SG
      e-zi   *nagda.*
      NEG-IMP.2SG reach
      'If it is a man, get in him, if it is a tree, don't get in it.' (K 111)

7.9.2.2. Necessity

In the 1st person Singular the Subjunctive also expresses an internal obligation, cf.:

(430) a. *Anda-tigi:*   *zima-za-mi.*
         friend-LAT.1SG   visit-SUBJ-1SG
         'I should visit my friend.'
     b. *Susa-gi-ze-mi*   *bi.*
         escape-REP-SUBJ-1SG me
         'I must escape.'

Other Subjunctive forms may express necessity or promise.

(431) *To:*   *puza-nie*   *ende-u-ji,*   *nua-ni*
      fire   master-3SG   wound-PAS-PRP   he-3SG
      tagda-za.
      get.angry-SUBJ
      'One can wound the master of the fire, (and) he will (necessarily) get angry.' (SKX 306)

Sometimes the Subjunctive is also used in the apodosis part of the conditional sentence with a future time of reference, although in this function the Future Indicative is more regular. The Subjunctive here implies a necessity.

(432) *Nua-ni* *ŋua-lisi-ni*   *teu*   *eke*   *dian-a-za-ti.*
      he-3SG sleep-CC-3SG all   quiet   say-0-SUBJ-3PL
      'If he sleeps, everybody should speak quietly.'

7.9.2.3. Uncertainty

The Subjunctive can be used in uncertain or doubtful statements. In this function it occurs in all persons and numbers. The examples below demonstrate that the uncertain statement expressed by the Subjunctive normally has a future

time reference. It is also possible to use the Subjunctive in uncertain statements that have a general timeless character (434).

(433) a. *Bi e-zeŋe-i*   *ŋene*   *uta-uxi*   *Iwana*
me NEG-FUT-1SG   go   that-LAT   Ivan
koŋko-zo.
beat-SUBJ
'I won't go there, Ivan might beat (me).'

     b. *E-zi*   *wuese moxo-wo*   *camna-za.*
NEG-IMP.2SG   throw cup-ACC   break-SUBJ
'Don't throw the cup, it might break.'

     c. *Ei teŋku-le*   *e-zi*   *te:*
this chair-LOC   NEG-IMP.2SG   sit
tiŋme-ze-i.
fall-SUBJ-2SG
'Don't sit on this chair, you might fall down.'

     d. *Ei käŋa-wa*   *sieni-e-mi,*
this deer-ACC   wound-PAST-1SG
ŋene-mi-ze   *xai*   *bude-ze.*
go-INF-HORT   anyway   die-SUBJ
'I wounded this deer, it will walk (away) and die anyway.'

(434) a. *Egdeŋe,*   *ni:-xi-de*   *bi-ze-ni.*
interesting   man-ADJ-FOC   be-SUBJ-3SG
'It is interesting, apparently there are people.' (K 181)

     b. *Nua-ni*   *ata-da*   *ñoni*   *uli-mi.*
he-3SG   NEG.SUBJ-FOC   can   sew-INF
'I doubt that she can sew.'

Cf. also the following contrast. (435a) is infelicitous because, according to the speaker, the situation of feeling bad is not predictable for certain, therefore it can be expressed only with the Subjunctive (435b) and not with the regular Future.

(435) a. **Min-du*   *ge:*   *bi-zeŋe-ni.*
me-DAT   bad   be-FUT-3SG
'I will feel bad.'

     b. *Min-du*   *ge:*   *bi-ze.*
me-DAT   bad   be-SUBJ
'I will feel bad.'

In embedded clauses the Subjunctive refers to the future with respect to the event described by the matrix clause. The matrix clause verb is in this case a non-factive verb, and can be either in the past or the present.

(436) a. *Bi   muisi-e-mi*   *abuga-i*   *min-e-we*
    me   think-PAST-1SG   father-1SG   me-0-ACC

    men-zi   *geje*   *xebu-ze*   *gumu*
    REF-INST   together   take-SUBJ   EV

    wakca-na-mi.
    hunt-DIR-INF

    'I wanted my father to take me hunting with him.'

  b. *Si   muisi:-si*   *ono*   *nixe-ze*   *nagda-za:-s*
    you think-PC.2SG   how   do-SUBJ   reach-SUBJ-DIS

    ja-za:-s.
    PROV-SUBJ-DIS

    'What do you think: will he reach (the target), or not?'

7.9.2.4. Questions

The Subjunctive can be used in deliberative questions, that is, questions about actions that the speaker himself is supposed to perform. In this function only 1st person forms occur.

(437) a. *Zugdi-tigi*   *i:-ze-mi?*
    house-LAT   enter-SUBJ-1SG
    'Shall I enter the house?'

  b. *Sin-du   ule:-we*   *gazi-ze-mi?*
    you-DAT   meat-ACC   bring-SUBJ-1SG
    'Shall I bring you some meat?'

  c. *I:mi*   *tagda-za-mi?*
    why   be.angry-SUBJ-1SG
    'Why shall I be angry?'

  d. *J'e-le*   *b'a-za-mi*   *ni:-we*   *belesi-lege-ti?*
    what-LOC   get-SUBJ-1SG   man-ACC   help-PURP-3PL
    'Where can I find people to help me?'

Questions about the future asked when there is some doubt about the reality of the situation are illustrated below.

(438) a. *Ono*   *metu-ze-m(i)*   *bi?*
    how   finish-SUBJ-1SG   me
    'How shall I finish it?'

  b. *Ono*   *ŋene-ze-i?*
    how   go-SUBJ-2SG
    'How will you go?'

c.   *J'emi*   *ata-mi*   *mute?*
     Why   NEG.SUBJ-1SG   finish
     'Why won't I be able?'

7.9.3. Necessitative

Necessitative forms with subject agreement (7.5.3.1) and without subject agreement (7.5.3.2) do not seem to differ in meaning. The Necessitative expresses different deontic meanings – such as obligation, necessity, promise, both in a factual and counterfactual situation. The modal state is always anterior with respect to the moment of speech.

(439) a. *Nua-ti*   *anana*   *jexe-zeɲe*   *bi-si-ti.*
          he-3SG   long.ago   sing-FP   be-PAST-3PL
          'They should have sung a long time ago.'

      b. *Si*   *nua-ti-we*   *gele-zeɲe*   *bi-s'e-i.*
          you   he-3SG-ACC   call-FP   be-PERF-2SG
          'You should have called them.'

      c. *Bi*   *anana*   *ɲene-u-zeɲe*   *bi-si-ni*   *Moskwa-tigi.*
          me   long.ago   go-PAS-FP   be-PAST-3SG   Moscow-LAT
          'I had to go to Moscow a long time ago.'

      d. *Bi*   *oño-wo*   *oño-zoɲo*   *nixe:-mi.*
          me   letter-ACC   write-FP   do.PAST-1SG
          'I had to write a letter.'

      e. *Nua-ni*   *wakca-na-zaɲa-ni*   *bi-s'e.*
          he-3SG   hunt-DIR-FP-3SG   be-PERF
          'He had to go hunting.'

      f. *Bu*   *dian-a-zaɲa*   *bi-s'e-u.*
          we   say-0-FP   be-PERF-1PL.EX
          'We promised to say (it).'

The Necessitative is possible in the epistemic function, however this is a fairly rare option.

(440) *Nua-ni*   *ɲene-zeɲe*   *bi-s'e.*
      he-3SG   go-FP-3SG   be-PERF
      'He must have left.'

A necessitative situation that obtains at the same time as the moment of speech is expressed by the periphrastic construction (see 7.10.3). Note, however, that the passive Necessitative (16.1.2.5) distinguishes between the Present and Past tense.

7.9.4. Conditional

The Conditional is used in the matrix (apodosis) clause of complex sentences that express a counterfactual condition. Occasionally a conditional embedded clause may be absent (442).

(441)   *Nua-ni   o-du*   *bi-si   aja   bagdi-muse-i.*
he-3SG   this-DAT   be-PC   good   live-COND-1SG
'If he were here I would have lived well.'

(442)   a.   *Nua-ti*   *bu-du-muse*   *ule:-we.*
he-3PL   give-PL-COND   meat-ACC
'They would have given (him) some meat.'

b.   *Minti*   *etete-muse-ti*   *birigadira-fi*
we   work-COND-1PL.IN   foreman-1PL.IN
unugu-li-e-ni.
get.ill-INC-PAST-3SG
'We would have worked, but our foreman got ill.'

c.   *Bei*   *sin-e-we*   *koŋko:-mi*   *bi,*
in.vain   you-0-ACC   beat.PAST-1SG   me
b'ata-wa   *b'a-muse-i-ze.*
boy-ACC   get-COND-2SG-HORT
'I was beating you in vain, you might have given birth to a boy.'

For further information on conditional clauses, see 21.8.

7.9.5. Permissive

The Permissive is a rarely used mood, since nearly all its meanings can be expressed by the Subjunctive or Imperative. The term Permissive is very conventional, because permissive is only one of several possible meanings. The Permissive has three rather different functions: permissive, uncertain Future, and deliberative questions. In fact, Schneider describes the Permissive as two different sets of forms, one for a type of Imperative (the 2nd person) and the other one as a remote Future (all personal forms). However, these two sub-paradigms exhibit a complete formal (and partly a semantic) parallelism, and are therefore here unified in one paradigm, that of the Permissive mood.

7.9.5.1. Permissive meaning

First, the Permissive expresses agreement or permission oriented directly towards the addressee. In Schneider's description (Schneider 1936: 120), this

form is treated as a subtype of the Imperative, which expresses either exhortation directed to the immediate present moment, or a polite request, or the granting of permission. In these cases only the 2nd person Permissive forms are possible.

(443) a. *Gun-te-i-ze*   *dian-a-ta-i-ze.*
      say-PERM-2SG-HORT   say-0-PERM-2SG-HORT
      '(OK), say it, tell it.'

    b. *Ge*   *gazi-mi-de*   *gazi-te-i-ze.*
      well   take-INF-FOC take-PERM-2SG-HORT
      'OK, if you take it, take it.' (K 113)

    c. *Wende-te-i-ze.*
      throw-PERM-2SG-HORT
      '(OK), throw it.'

    d. *Ñugasi-je*   *bi*   *tada-i*   *duo-wo-ni*
      kiss-IMP.2SG   me   spear-1SG   end-ACC-3SG
      uta-digi   *min-e-we*   *ñuga-si-te-i-ze.*
      that-ABL   me-0-ACC   kiss-IM-PERM-2SG-HORT
      'Kiss the end of my spear, then you may kiss me.' (K 199)

    e. *Bi*   *e-si-mi*   *b'a-gi*   *kusige-we.*
      me NEG-PAST-1SG   find-REP   knife-ACC
      Amä:lie   *b'a-gi:*   *bu-te-i-ze.*
      later   find-REP.2SG   give-PERM-2SG-HORT
      'I haven't found the knife. (OK), you will find it and give it back later.'

7.9.5.2. Uncertain Future

Second, the Permissive is employed to express an uncertain future event, and probability. In this case Schneider referred to it as "remote future". In this function the Permissive is possible in all persons and numbers.

(444) a. *ŋene-te-mi-ze.*
      go-PERM-1SG-HORT
      'Perhaps I will go.'

    b. *Ge:-zi*   *uli-se,*   *amä:lie*
      bad-INST   sew-PP.PAS   later
      uli-gi-te-mi-ze.
      sew-REP-PERM-1SG-HORT
      'It is sewn badly, perhaps I will resew it later.'

Implications triggered by the Permissive are that of agreement (445) or promise (446).

(445)   *ŋene, ŋene!*   *ŋene-te-m(i)-ze.*
        go   go   go-PERM-1SG-HORT
        'Go, go! – OK, I will go.'

(446) a.   *Eke*   *bi-li*   *eme-te-m(i)-ze.*
            time   be-COND   come-PERM-1SG-HORT
            'If I have time I will come.'
       b.   *Toŋdo-zi*   *ŋene-mi*   *nagda-ta-i-ze.*
            straight-INST   walk-INF   reach-PERM-2SG-HORT
            'By going on straight ahead you might reach (it).'
       c.   *Xam'asi*   *eme-te-mi-ze.*
            later   come-PERM-1SG-HORT
            'I will come later.'

7.9.5.3. Deliberative questions

The Permissive occurs in deliberative questions.

(447) a.   *Ja-la-mi*   *wuende-te-mi?*
            PROV-PURP-SS   throw-PERM-1SG
            'Why should I throw (it)?'
       b.   *J'eu*   *sita*   *a-ta*   *jada?*
            what   child   NEG-PERM.3SG   be.tired
            'What child wouldn't be tired?' (K 128)

7.10. Function of the non-finite forms

Non-finite forms are typically used in subordinate clauses; these are addressed at more length in Chapters 19–21. In the finite function the non-finite forms can be either a component of an analytical category, or of a copular construction (on copular constructions see Chapter 17). The table below summarizes the syntactic functions of the non-finite forms.

(448)

	relative	embedded clauses		main clause
		complement	adverbial	
Active participles	+	+	+	+
Other participles	+	+	-	+
Purposive Converbs	-	+	+	-
Other converbs	-	-	+	-
Infinitives	-	+	+	+

7.10.1. Participles

Participles are similar to verbs in that they convey temporal, modal, aspectual and voice meanings. Active and Passive Present, Past, and Future Participles indicate a relative tense. Resultative and Destinative Participles express generic situations non-specified with respect to tense.

7.10.1.1. Active Participles

Active participles are the most polyfunctional non-finite verbal category (see the table of syntactic functions of the non-finite forms in 7.10). They preserve the valence patterns of the base verbs.

7.10.1.1.1. Finite predicates

Active participles in combination with the auxiliary verb 'be' are used as a finite verb. The Impersonal Present Participle with the copula 'be' expresses the Habitual aspect (7.4.2). The Past Participle in personal and impersonal forms in combination with the verb 'be' forms the Pluperfect tense (7.4.1.5). Future Participles (mostly impersonal, but in rarer cases also personal) in combination with the Past form of the verb *bi-* form the Necessitative (7.5.3). Active participles occur in the analytical Irrealis Conditional Converb (7.6.2.4.2).

It is not uncommon to use the Past and especially the Present active participles in their impersonal forms as finite predicates without a copula. They are synonymous with finite verbs in the Past and Present, cf.: *nixe-ini* <do-3SG> and *nixe-i* <do-PRP> 'he does', *nixe:-ni* <do.PAST-3SG> and *nixe:* <do.PRP> 'he does'. In fact, under Sunik's (1968, 1997) analysis, such forms are treated not as participles, but as 3rd person finite forms within the regular paradigm. This conclusion follows because Sunik did not recognize impersonal participial forms. Participles in finite positions are very frequent in the narrative genres (see the texts in Chapter 25) but occur rarely in everyday speech.

7.10.1.1.2. Relative clause

As non-finite predicates, active participles in personal and impersonal forms serve to express a relative clause, cf.:

(449) *ni:-we*   *wa-i*   *amba*
      man-ACC   kill-PRP   spirit
      the spirit who kills people

Active participles may refer to any participant of the situation described by the relative clause.

(450) a. *bi   ag'a-i   xoton-du   bagdi-le-i-ni*
         me   brother-1SG   city-DAT   live-LOC-PRP-3SG
         'in the city in which my brother lives'
      b. *ta:mati   bu-o: getu   kusige*
         last.year   give-PP   PL   knife
         'the knife which was given last year'

Since the Active participle is not semantically oriented to a particular function, this makes it possible to relativize several syntactic positions using Active participles. The ability of the Active participles in relative clauses to take case and personal suffixes depends on the structural and semantic type of the relative clause. Normally, if they precede the noun they do not inflect for case, but if they follow the relativized noun they take case affixes. Personal affixes on the participle cross-reference the relative clause subject (see Chapter 19 for more detail). The substantivized impersonal participles form a headless relative clause, cf.:

(451) *Ei   zugdi-we*   *wo:*   *getu*   *anana*
       this house-ACC   make.PP   PL   long.ago
       ŋene:-ti.
       leave.PAST-3PL
       'Those who had made this house left a long time ago.'

In a relative clause participles generally have the same temporal meaning as the corresponding finite forms.

7.10.1.1.3. Complement clause

As discussed in Chapter 20 in more detail, active participles in the Accusative are used to express complement clauses:

(452) *Bi   xono:-mi   nua-ti   eme-gi-e-me-ti.*
       me   surprise.PAST-1SG he-3SG   come-REP-PP-ACC-3PL
       'I was surprised that they came.'

In such clauses, the personal forms agree with the subject of the embedded clause in number and person. The impersonal forms entail the impersonal or generic interpretation of the embedded clause.

The tense forms of the participles have a relative temporal meaning, that is, they express the tense relative to the event described by the matrix clause, cf.

(453a), where the Past Participle expresses the relative past tense with respect to an event in the past, (453b), where the Future Participle expresses the future relative to the past, and (453c), where the Present Participle expresses the present relative to the past.

(453) a. *Bi   sa:-mi*   *Iwana   eme-gi-e-me-ni.*
         me   know.PAST-1SG   Ivan   come-REP-PP-ACC-3SG
         'I knew that Ivan came.'

      b. *Bi   sa:-mi*   *Iwana   ele   eme-gi-zeɲe-ni.*
         me   know.PAST-1SG   Ivan   soon   come-REP-FP-3SG
         'I knew that Ivan would come soon.'

      c. *Bi   sa:-mi*   *Iwana   eme-gi:-we-ni*
         me   know.PAST-1SG   Ivan   come-REP.PRP-ACC-3SG
         'I knew that Ivan is coming.'

Impersonal forms of participles may be used in a complement clause if its subject has a generic interpretation, cf.:

(454) *Uta bede*   *gusi-mi*   *b'ata-ma*   *sita-ziga*
      that like   play-INF   boy-ADJ   child-PL
      ɲiča-digi   *sa:-iti*   *ono-do*   *onobui bui*
      small-ABL   know-3PL   how-FOC   which   animal
      xokčo-i-we-ni,   *ono-do*   *wakča-i-we.*
      attack-PRP-ACC-3SG   how-FOC   hunt-PRP-ACC
      'Playing like this boys learn how each animal attacks and how one should hunt.' (SKX 302)

7.10.1.1.4. Adverbial clause

With various case suffixes and postpositions, personal participle forms are used to express different types of adverbial subordination, for example:

(455) *Nua-ni*   *soɲo:n-zi*   *ŋua:-ni.*
      [he-3SG   cry.PP-INST.SS]   sleep.PAST-3SG
      'After crying she fell asleep.'

These cases are described in more detail in Chapter 21.

7.10.1.2. Passive participles

Passive participles have two distinct functions.

First, they are used as a finite predicate. In this case they express an impersonal situation in the Agentless Passive constructions. The agent of the action expressed by such a participle is understood as universal or indefinite, and the sentence has a generic reading, see 16.1.2. The passive participles are in the Present, Past, or Future and co-occur with the copula verb. Passive participles derived both from transitives and intransitives are used in this function.

Second, passive participles serve to express relative clauses. In this function the passive participles derived from transitives are mostly used, since the relativized noun corresponds to the patient/theme argument (see Chapter 19). These passive participles may express an impersonal meaning in this case as well.

(456) a. *Tugbu-se*   *mo:-lo*   *te:-mi.*
          cut-PP.PAS   tree-LOC   sit.PAST-1SG
          'I was sitting on the cut down tree.'

     b. *Mo:-wo*   *tugbu-se-le*   *te:-mi.*
          tree-ACC   cut-PP.PAS-LOC   sit.PAST-1SG
          'I was sitting on the cut down tree.'

Passive participles derived from intransitives are very rare in this function, however they are not totally impossible. The examples below demonstrate that they are available to express a generic situation, while the relativized noun corresponds to any non-subject constituent.

(457) a. *Sukpai*   *Samargi-tigi*   *we:-li-u-i*   *bua-la*
          Sukpai   Samarga-LAT   mountain-V-PAS-PRP   place-LOC
          to: ŋi   *bie.*
          lake   be.PRES.HAB
          'There is a lake at the place where one crosses the mountain from
          Sukpai to Samarga.' (SK 776)

     b. *ŋua-u-zeŋe*   *eki-me-ni*   *i:ŋ-ki-ni.*
          [sleep-PAS-FP]   time-ACC-3SG   enter-PAST-3SG
          'Bedtime came.' (K 131)

     c. *Mafa-wa*   *wakca-u-i*   *koli*   *bie.*
          bear-ACC   hunt-PAS-PRP   law   be.PRES.HAB
          'There is a bear hunting law.'

7.10.1.3. Destinative Participles

Like passive participles, Destinative Participles have two syntactic functions: they are used as finite predicates or in a relative clause.

7.10.1.3.1. Destinative function

In both functions the Destinative Participle expresses the action for which one of the participants of the sentence is destined, meant, or designed. They may be semantically oriented to the instrument (458a), location (458b), patient/theme (458c), and very rarely to the agent (458d).

(458)	a.	*wakca-kči*	'(designed) for hunting (with)'
		juosi-kči	'(designated) for cutting (with)'
	b.	*olokto-si-kči*	'(designated) for cooking (in)'
	c.	*umi-kči*	'(designed) for drinking'
	d.	*wa:-kči*	'(designated) for killing'

The Destinative Participle does not express time reference. The situation is understood as universal, cf.:

(459) *Bu-je*   *min-du*   *in'ei-we* *egbesi-kči*   *xeku-we.*
give-IMP.2SG   me-DAT   dog-ACC tie-DP   rope-ACC
'Give me a rope to tie the dog.'

On finite copular constructions with the Destinative Participles see Chapter 17.

7.10.1.3.2. Past meaning

In certain rare cases the Destinative Participle in the relative clause has a Past rather than a destinative meaning. It can then substitute for the Past Participle. Used in this function the Destinative Participles are subject-oriented and apparently available for all verbs. They may take personal inflections that refer to the subject of the relative clause (see Chapter 19 for examples and more discussion). In fact Schneider (1936) cited the forms that are described here as Destinative Participles as regular Past Participles.

7.10.1.3.3. Generalized relative clause

Destinative Participles are employed as non-finite predicates in a generalized relative clause with a negative meaning (23.2.1.6.4). They are the only way to express this meaning.

7.10.1.4. Resultative Participles

Resultative Participles are formed from all transitive and many intransitive verbs. Intransitive atelic verbs such as *tukä:-* 'run', *ilana-* 'shine', *su:le-* 'be ill', *xeŋpi-* 'snore', *azana-* 'be shy', *agda-* 'be happy', *asigi-* 'to be recovered', *gända-* 'be lazy', and *ekisi-* 'dream' do not have Resultative Participles.

Resultative Participles refer to a state that is a result of a previous situation. Formed from intransitive verbs, they express the subject-oriented resultative, that is, the single argument of the Participle (the subject of the resulting state) coincides with the subject of the prior action.

(460)

deu-	'get tired'	*deu-ktu*	'tired'
auli-	'swell'	*auli-ktu*	'swollen up'
su:-	'go down (of light)'	*su-ktu*	'gone down'
xa:-	'become shallow'	*xa-ktu*	'grown shallow'
kimpi-	'close' (Intransitive)	*kimpi-ktu*	'closed'
pama-	'get lost'	*pama-ktu*	'got lost'
zegde-	'burn'	*zegde-ktu*	'burnt'
lali-	'starve'	*lali-ktu*	'having starved'
bogoli-	'get frightened'	*bogoli-ktu*	'frightened'
sabda-	'drop'	*sabda-ktu*	'having dropped'
sokto-	'get drunk'	*sokto-ktu*	'drunk'
soŋo-	'cry'	*soŋo-ktu*	'having started crying'

Transitives regularly form the object-oriented resultative. It expresses the state of the object of the previous situation.

(461)

guzaga-	'tear'	*guzaga-ktu*	'torn'
oño-	'write'	*oño-ktu*	'written'
siki-	'wash'	*siki-ktu*	'washed'
cemine-	'deceive'	*cemine-ktu*	'deceived'

The Resultative Participle is used as a finite predicate in resultative copular constructions (17.2.2.5). In addition it serves to express the relative clause with a resultative meaning (see Chapter19). Both the subjective and objective Resultatives are used in both functions.

7.10.2. Converbs

The main function of converbs is to form an adverbial, and sometimes also a complement, embedded clause. A detailed description of converbial embedded clauses can be found in Chapters 20 and 21.

7.10.2.1. Purposive Converb

In the absolute majority of cases the Purposive Converb serves to form a purpose embedded clause (21.4). It is also used in a subordinate complement clause with subject control (same-subject forms, see 20.2.3.1) and object control (different-subject forms, see 20.2.3.2).

7.10.2.2. Imperfective Converb

The Imperfective Converb serves to express the adverbial temporal clause. The events described by the main clause and the subordinate clause both refer to the same moment in the past, and both verbal forms in this case have an imperfective meaning (21.3.2.1). Thus, the Imperfective Converb expresses simultaneity with respect to the situation in the past.

7.10.2.3. Perfective Converb

The Perfective Converb is used in the adverbial temporal clause (see 2.3.2.2). In contrast to the Imperfective Converb, it conveys a situation which is prior to the situation of the main clause, so it expresses the relative past tense with respect to the matrix clause. Often the Perfective Converb has an implicit additional meaning of cause.

7.10.2.4. Conditional Converbs

Conditional Converbs express a condition in a conditional subordinate clause (protasis). The condition may be factual (non-hypothetical), in the case of the Realis Conditional Converb, or counterfactual, in the case of the Irrealis Conditional Converb. For more detail see 21.8. Occasionally, an embedded clause with a Past Subjunctive Conditional Converb does not have a conditional meaning in the strict sense, but expresses a temporal meaning (21.3.2.3) or a non-specific adverbial subordination with different additional implications, for example, that of an unrealized action in the past:

(462) *Bi   sin-tigi*   *eme-kce-i*   *bi-si*   *eniŋe-i*
      me you-LAT   come-DES-PRP   be-PAST   mother-1SG
      e-ini   *tinda.*
      NEG-3SG   let
      'I wanted to come to see you, but my mother does not let me.'

7.10.3. Infinitives

All types of infinitives express the general idea of action and do not refer to any particular time. Unlike most other non-finite verbs, the Infinitive has only same-subject forms.

The Infinitive has three different functions.

First, in combination with the auxiliary *bi-* it forms a finite predicate, namely, the Progressive aspect (7.4.3). Second, the Infinitive functions as a non-finite verb in certain complement embedded clauses with a subject (463a) or direct object (463b) meaning.

(463) a. *Min-du*   *o-du*   *te:-mi*   *aja.*
         me-DAT   this-DAT   sit-INF   good
         'It is nice for me to sit here.'

      b. *Iwana*   *wadi-e-ni*   *jexe-mi.*
         Ivan   stop-PAST-3SG   sing-INF
         'Ivan stopped singing.'

Chapter 20 provides further descriptions of such constructions.

Finally, it is used in an adverbial clause in which the subject is always co-referential with the matrix clause subject (21.1). In most cases the infinitival adverbial clause is non-specified semantically and expresses an associated situation. In some cases the clause is coordinated with the main clause rather than exhibiting syntactic embedding. It may also be used as an adverbial of manner (464a), or have an additional implied adverbial meaning, such as temporal, causal (464b), or concessive.

(464) a. *Nua-ni*   *ŋele-mi*   *susa-gi-e-ni.*
         he-3SG   get.frightened-INF   escape-REP-PAST-3SG
         'He escaped being frightened.'

      b. *Aziga*   *mafa-la-mi*   *soŋo:-ni.*
         girl   man-V-INF   cry.PAST-3SG
         'The girl was crying while (because of) getting married.'

The following sentence is an isolated example of the Infinitive in the Instrumental case form:

(465) *Aziga-ziga*   *gusi:-ti*   *ñah-wa*   *ehli-m(i)-zi.*
      girl-PL   play-3PL   skin-ACC   process-INF-INST
      'The girls play while processing skins.' (SK 1112)

The Impersonal Infinitive is only used in impersonal sentential subject clauses (20.1.1.1), cf.:

(466) *O-du*   *bagdi-mu*   *aja.*
     this-DAT   live-IMI   nice
     'It is nice to live here.'

7.11. Periphrastic tense/aspect/mood categories

In this section we address analytical verbal forms which do not include a standard auxiliary 'be' as their component, but rather other elements.

7.11.1. Alternating action

Alternating actions are expressed by a construction in which two different verbs have the bare Perfect stem, and the finite categories are expressed by the auxiliary *wo:-* or *nixe-* 'do' in the Present or in the Past. The situation accordingly pertains either to the Present or to the Past. The construction, therefore, includes three verbs. The two actions named by the two content verbs are perceived as quickly alternating with each other and as being performed by the same participant. The shared subject is expressed only once, cf.:

(467) a. *Nua-ni*   *iñe-kc'e*   *soŋo-kc'o*
          he-3SG   laugh-DUR.PERF   cry-DUR.PERF
          wo:-ini.
          do-3SG
          'He laughs and cries (alternately).'
     b. *Tigde*   *tigde-li-ge*   *wadi-ge*   *wo:-ini.*
          Rain   rain-INC-PERF   stop-PERF   do-3SG
          'The rain starts and stops, starts and stops.'
     c. *Tiŋmeli-ge*   *te:gi-ge*   *nixe:-ni.*
          fall-PERF   get.up-PERF   do.PAST-3SG
          'He was falling down and getting up (repeatedly).'
     d. *Fonari*   *zegdel'e*   *su:g'e*   *wo:-ini.*
          lamp   flare.up.PERF   die.out.PERF   do-3SG
          'The lamp flares up and dies out (repeatedly).'

At least one example is also found in which the alternating action is performed by two different participants. They correspond to two subjects, both of which are followed by the content verb. The copula verb is present only once and demonstrates Singular agreement.

(468)   *Gagda   aziga   soŋ'o,   gagda   aziga   jex'e*
        another   girl   cry.PERF   another   girl   sing.PERF
        wo:-ini.
        do-3SG
        'One girl is crying, another girl is singing.' (K 132)

7.11.2. Immediate future

The Immediate future is expressed by a combination of the time adverbial *ele (ele)* 'in the nearest future, soon' and the Past or Perfect form of the content verb augmented by the Inchoative derivational suffix *-li-* (on this suffix see 8.2.2.1).

(469)   a.   *Ele   ele   kaktaga-li-e-ni.*
             soon   soon   burst-INC-PAST-3SG
             'It will burst soon.'

        b.   *Nua-ni   ele   eme-gi-li-ge.*
             he-3SG   soon   come-REP-INC-PERF
             'He will return soon.'

        c.   *Sele-we   tausi:-ti   ele   c'aligi*
             iron-ACC   forge-3PL   soon   white
             ede-li-e-ni.
             become-INC-PAST-3SG
             'They forge iron, and soon it will become white.'

        d.   *Iŋzala-ma   gou-i   ele   ele   buktag'a.*
             fir.tree-ADJ   pole-1SG   soon   soon   break.PERF
             'My pole made of fir tree is about to break.' (K 122)

7.11.3. Periphrastic Necessitative

The Periphrastic Necessitative construction is borrowed from Russian, as is one of its components. It uses the Russian loanword *nade* 'must', sometimes augmented by the derivational suffix *-lA*, that is, *nade-le* 'must' (on this suffix see 8.1.1.3). The content verb precedes the modal predicate *nade(le)* in the form of the Simple Infinitive (470a), the same-subject form of the Purposive Converb (470b), or the finite form in the Present tense (470c).

(470)   a.   *Bi   Oloŋo-tigi   ŋene-mi   nade.*
             me   Olon-LAT   go-INF   must
             'I must go to Olon.'

b. *Men-e*   *kaiŋku-i*   *gene-gi-lege-mi*   *nade.*
   REF-0   brake-REF.ACC   fetch-REP-PURP-SS   must
   'I must fetch my leather brake.'

c. *B'ata*   *mä:usa-na-ni*   *gada-iti*   *nade-le.*
   Boy   gun-DEST-3SG   buy-3PL   must-V
   'They must buy a gun for the boy.'

The Periphrastic Necessitative refers to the obligation that obtains at the moment of the utterance. It therefore differs in time of reference from the regular Necessitative (7.5.3), which always expresses a modal situation in the past.

7.11.4. Expressive Past

Two impersonal verbal forms are used in the expressive style of speech to render a (perfective) situation in the past. These forms do not exhibit subject agreement, that is, each of them is used for all grammatical numbers and persons.

7.11.4.1. Expressive Past in *-k*

The impersonal Expressive suffix *-k* (sometimes pronounced as *-ʔ*) may be related historically to the derivational Expressive affix *-ki-, -kA-* (8.2.2.11.2). However, synchronically their usage differs. The verbal forms with the *-k* suffix are impersonal, and the action necessarily takes place prior to the moment of speech. They take neither any tense/mood/aspect markers nor any personal affixes and do not co-occur with negation. The intensive suffixes *-ki-*, *-kA-*, on the other hand, derive a fully inflected verb that has personal inflections and can have different temporal forms (excluding the Present). The suffix *-k* attaches to the Past stem (7.1.2).

(471) Expressive   bare stem   Past stem
      olokto:-k   'cooked'   *olokto-*   *olokto:-*
      agbu-o:-k   'took out'   *agbu-*   *agbu-o:-*
      xuaji-e-k   'cut'   *xuaji-*   *xuaji-e-*

The forms in *-k* have an intensive meaning, that is, they express an intensive and/or sudden action in the Past, cf.:

(472) a. *Nua-ni*   *iligi-e-k.*
         he-3SG   jump-PAST-EXPR
         'He jumped up (suddenly).'

b. *Bi   nakta-wa   gida-la:-k   uŋele*
   me   boar-ACC   spear-V.PAST-EXPR   further
   ŋene:-mi.
   go.PAST-1SG
   'I killed the boar (with the spear) and went further.'

c. *Jegdige   eme:-k.*
   hero   come-PAST-EXPR
   '(Suddenly) the hero came.'

In folklore texts the impersonal intensive forms do not necessarily refer to an intensive or sudden action. Sometimes they can simply be used to refer to a single perfective situation in the past (473a), or, more frequently, to a sequence of several perfective events (473b), and they can easily be coordinated with the regular Past (473c). However, forms with the expressive suffix *-k* are not regarded as "prestigious". Although informants often use them spontaneously when recounting folklore, upon inquiry they advise that these forms should be avoided.

(473) a. *Činda   lagbana:-k.*
          bird   stick.PAST-EXPR
          'The bird got stuck.'

       b. *Di:xi   taŋda:-k,   uli*
          on.the.riverbank   carry.PAST-EXPR   water
          s'olo:-k,   zugdi: neugi-se:-k,
          scoop.PAST-EXPR   house.LAT   take-EXP.PAST-EXPR
          sugese-i   gazi-gi-se:-k.
          axe-REF   bring-REP-EXP.PAST-EXPR
          'She carried (it) to the riverbank, scooped out some water, took it home and brought an axe.' (K 191)

       c. *Ogdö-wo   xoa-na:-k,   zugdi-ti:*
          coffin   cut-DIR.PAST-EXPR   house-LAT
          gada:-ni.
          take.PAST-3SG
          'He made the coffin and took it home.' (K 190)

The construction in question may in fact go back to the periphrastic construction in which a personal form of the verb *wo:-* 'do, make' in the Present, Future or the Past is employed together with the form in *-k*. Such a construction sounds archaic in the modern language, but still occurs, cf.:

(474) a. *Xeŋgisi-e-k*   *wo:-ini.*
          stamp.on.snow-PAST-EXPR   make-3SG
          'He hid (the meat) stamping on the snow.' (K 179)

b. *Agdi*   *sakine:-k,*   *tigde-li-e-k*
   thunder   clap.PAST-EXPR   rain-INC-PAST-EXPR
   wo:-ini.
   do-3SG
   '(Suddenly) the thunder broke, and it started raining.'

c. *Uta-wa*   *mamasa-la:-k*   *wo:-ni.*
   that-ACC   wife-V.PAS-EXPR   make.PAST-3PL
   'Then he got married.'

d. *Ete-k*   *o:-zoŋo-fi.*
   win-EXPR   make-FUT-1PL.IN
   'We will win!' (SK 1141)

On the other hand, the verb *wo:-* 'do, make' is compatible with the bare or inflected Past or (more seldom) the Present stem of the content verb. The resulting construction has the same meaning.

(475) a. *Umu-i*   *umu-le-gie*   *tege-i*
     belt-REF   belt-V-REP.PAST   gown-REF
     teti-gie   *o:-ni.*
     dress-REP.PAST   make.PAST-3SG
     'He put on the belt and the gown.' (SKX 96)

b. *Namu*   *eh-le-ni*   *nede:-ti*   *o:-ti.*
     sea   side-LOC-3SG put.PAST-3PL make.PAST-3PL
     'They put him from the side of the sea.' (SKX 134)

c. *Tu:*   *č'asa-i*   *o:-ti.*
     all   tickle-PRP   make.PAST-3PL
     'They always tickled her.' (SKX 190)

d. *Mamasa-la-ti*   *o:-ti.*
     wife-V-PC.SS   make.PAST-3PL
     'They immediately got married.' (SK 704)

7.11.4.2. Expressive Past in -*lA*

The Present verbal stem can be augmented by the suffix -*lA*, e.g., *ŋene-le* 'went'. The resulting forms do not take agreement affixes. In colloquial speech they usually indicate the Past tense and apparently do not convey an additional meaning in comparison to the regular Past, but are more expressive. As argued in Perexval'skaja (1991e, 1997), they appeared as a result of double pidginization (1.5). Forms in -*lA* are typical of the dialect of Iman and only occasionally occur in the Bikin dialect.

(476)   *Gänd'a-use*   *pala*   *siki-le,*   *su:*   *gakpa-la.*
         be.lazy-ADJ   floor   wash-PAST   sun   appear-PAST
         'A lazy (woman) washed the floor, and the sun appeared.' (a proverb)

Chapter 8
Verbal derivation

Verbs are formed with a large range of derivational affixes attached to a noun or an adjective, or to morphologically simpler base verbs. In the first case, suffixation marks the transition of a noun or an adjective to another grammatical class (the verb); in the second case, the grammatical class remains unchanged. In the verbal form the interclass derivational affixes immediately follow the verbal stem and precede the suffixes which form deverbal verbs. All derivational suffixes attach to the Present verbal stem. They are easily compatible with each other, and with various inflectional verbal categories. Non-finite verbal forms can easily host derivational verbal affixes. This refers not only to the affixes of the denominal derivation of verbs, but also to the affixes of deverbal derivation, including aspectual, modal, and valence-changing affixes (an exception is provided by the Passive, which is not compatible with all non-finite forms). This point is illustrated below. In the example below the Infinitive bears the Repetitive and Experiential aspectual markers.

(477) *Eme-gi-se-mi-de*   *ei*   *eme-gi.*
      come-REP-EXP-INF-FOC   NEG   come-REF
      'He had to return but he didn't return.' (SKX 328)

Some of the verbal derivational affixes are very frequent and productive; the lists of verbs provided for each case in this section are not intended to be exhaustive. Yet, verbal derivation is typically restricted to a certain subset of verbal stems. Therefore, for example, the Passive, which is formed only from transitives (8.2.1.5), is regarded as an instance of verbal derivation and not as an inflectional category. Furthermore, unlike inflectional categories, verbal derivation can alter the argument structure of the initial verb. This criterion classifies, for example, the absolutely productive Causative suffix -wAn-, compatible with virtually every verb (8.2.1.2), as a derivational suffix. A formal criterion that allows us to distinguish between derivational and inflectional verbal affixes in Udihe is negation. Unlike inflectional morphemes, derivational suffixes are preserved in the bare stem of the content verb in the negative conjugation (23.2). The negative auxiliary verb does not take derivational affixes, with the exception of the Passive. The examples below

288 Verbal derivation

present the Reciprocal (478), the Causative (479), the Decausative (480), and the Repetitive (481).

(478) *Nua-ti zuŋe*   *ni:-de*   *e-iti*   *dia-masi:-ti.*
he-3PL both   people-FOC   NEG-3PL   say-REC-3PL
'They don't talk to each other.'

(479) a. *Xunazi-di-fi*   *e-zi-u*   *ze-wen-e*
      sister-DAT-REF   NEG-IMP-2PL   eat-CAUS-0
      mafa   *ule:-we-ni.*
      bear   meat-ACC-3SG
      'Don't let your sisters eat the bear's meat.' (K 131)
    b. *Uti*   *jegdige*   *bui-we*   *e-ini*
      that   hero   animal-ACC   NEG-3SG
      xuli-wen-e,   *g'ai-wa*   *e-ini*   *dieli-wen-e.*
      go-CAUS-0   raven-3SG   NEG-3SG   fly-CAUS-0
      'This hero does not let an animal walk, and does not let a raven fly.'
    c. *E-zeŋe-i*   *diga-wan-a*   *sin-du.*
      NEG-FUT-1SG   eat-CAUS-0   you-DAT
      'I won't feed you.'

(480) *Negze* *ba:-la*   *käŋa* *xokto-ni*   *aja*   *ise-pte*
open   place-LOC   deer   footstep-3SG   good   see-DEC
mokt'oi-lo *käŋa* *xokto-ni*   *ei*   *ise-pte.*
bushes-LOC   deer   footstep-3SG   NEG   see-DEC
'At the open place the tracks of the deer are seen well, in the bushes the tracks of the deer are not seen.'

(481) a. *Bu* *zugdi-tigi*   *e-zeŋe-u*   *eme-gi.*
      we   house-LAT   NEG-FUT-1PL.EX   come-REP
      'We won't come back home.'
    b. *Nua-ti*   *ugda-wa*   *e-iti*   *aisi-gi.*
      he-3PL   boat-ACC   NEG-3PL   mend-REP
      'They didn't mend the boat.'

Compounding is not a widely used verb formation process in Udihe. Some examples of noun/adjective-verb compounding are discussed in section 8.3.

8.1. Interclass derivation

Affixes of the interclass derivation (those that derive verbs from nouns and adjectives) are denoted as V (verb) in the glosses. Most denominal verbal suffixes derive verbs that incorporate the base noun in their meaning, so the verb contains

the object in its own semantics. However, this does not normally lead to the suppression of the corresponding argument. For example, the suffix *-lA-* derives verbs from base nouns that are semantically the object of the corresponding verb: *au* 'cap' → *au-la-* 'put on a cap'. The verb *au-la-* behaves as transitive. Although the overt object need not be present in the sentence, it may be expressed by means of a separate word (482). A cognate object must be overtly present if it acts as a head of its own phrase and is modified by an adjective, as in (483a), a possessive phrase (483b), an adverb (483c), or if it includes a suffix-semantic modifier, such as the Diminutive suffix in (483d). This indicates that the derivation of most denominal verbs is opaque with respect to syntactic processes. A non-cognate object is obligatory (484).

(482) a. *Sama*   *ulikte*   *ulikte-si:-ni.*
         shaman   shaman.lard   shaman.lard-V-3SG
         'The shaman prepares the shaman lard.'

      b. *Ogdö-wo*   *ogdö-ŋi-ze-fi.*
         coffin-ACC   coffin-V-SUBJ-1PL.IN
         'Let us make a coffin.' (K 190)

(483) a. *Imexi*   *au-we-i*   *au-le-gi-je*
         new   cap-ACC-REF.ACC   cap-V-REP-IMP.2SG
         'Put on a new cap.'

      b. *Bi   au-we-i*   *au-le-gi-je.*
         me   cap-ACC-1SG   cap-V-REP-IMP.2SG
         'Put on my cap.'

      c. *Läsʲ*   *um'a-wa*   *um'a-ŋisi-e-ni.*
         many   hook   hook-V-PAST-3SG
         'He set up many (fish) hooks.' (K 141)

      d. *Au-ziga-wa*   *au-le-gi:-ni.*
         cap-DIM-ACC   cap-V-REP-3SG
         'He is putting on a little cap.'

(484) *sele-me*   *joxo-wo*   *au-le-gi-ge-si*
      iron-ADJ   pot-ACC   cap-V-REP-PERF-PC.SS
      'having put an iron pot on as a cap' (K 181)

However, the base noun of at least some verbs seems to be accessible for syntax. In particular, it is possible to modify the base noun without repeating the object.

(485) *Omo*   *ŋeni-ni*   *nada-ma*   *mo-mugu-ŋi-e-ni.*
      one   day-3SG   seven-ACC   tree-N-V-PAST-3SG
      'He produced seven piles of wood in one day.' (SKX 166)

The cognate object often (although not necessarily) remains morphologically unmarked and occurs in the bare form, especially in the Northern dialect, for which the morphological marking of the Accusative is less regular than for the Southern dialect (4.2.2.2). If the cognate object is not a direct object it is normally present in the sentence, for example, in (486) the cognate object of the denominal verb *t'a-la-* 'walk along the fallen tree' (< *t'a:* 'fallen tree') occurs within a postpositional phrase.

(486) *T'a*   *wei-le-ni*   *t'a-la-li-e-ni*
       fallen.tree   on-LOC-3SG   fallen.tree-V-INC-PAST-3SG
       oloxi.
       squirrel
       'The squirrel started walking along the fallen tree.'

Verbs derived from adjectives never require the repetition of the base adjective in a sentence.

Each suffix is normally used with a closed class of verbs.

8.1.1. Denominal derivation

Typically, the noun from which the verb is derived corresponds to either a (direct) object or an instrument.

8.1.1.1. The suffix *-mA-*

The suffix *-mA-* forms an intransitive verb with the prototypical meaning 'catch, hunt for' from a noun that names its object. This pattern is obviously restricted semantically, so in most cases only nouns that denote a potential object of hunting take this suffix.

(487) *sugdä:*   'fish'   *sugdä:-ma-*   'fish'
       l'asa   'goby fish'   *l'asa-ma-*   'catch goby fish'
       oloxi   'squirrel'   *oloxi-me-*   'hunt for squirrels'
       olondo   'ginseng'   *olondo-mo-*   'hunt for ginseng'
       a:nta   'woman'   *a:nta-ma-*   'womanize'
       ila-ka   'bast'   *ila-ma-*   'bark lime-trees'
       siŋe   'mouse'   *siŋe-me-*   'hunt for mice'
       guese   'pike'   *guese-me-*   'catch pikes'

With some other nouns the same suffix is used when the base noun has an instrument role with respect to the action described by the derived verb (458a),

or when it has a different lexical meaning about which it is difficult to generalize (488b).

(488) a.
dukta	'ski'	*dukta-ma-*	'ski'
to:	'fire'	*to-mo-*	'warm on a fire'
ikte	'tooth'	*ikte-me-*	'bite'
zege	'reference-point'	*zege-me-*	'orientate oneself'

b.
kakt'a	'half'	*kakt'a-ma-*	'divide in half'
xoto(n)	'city'	*xoto-mo-*	'go to a city'
a:da	'mountain pass'	*a:da-ma-si-*	'cross the mountain pass'

8.1.1.2. The suffix -*tA*-, -*dA*-

Another suffix that derives verbs from nouns with an instrumental or related meaning is -*tA*- (489a) or -*dA*- (489b). The rules governing the distribution of these two variants are not clear.

(489) a.
| *anda* | 'friend' | *anda-ta-* | 'be a friend' |
| *mozoli* | 'beads' | *mozoli-te-* | 'wear beads' |

b.
tiu	'stick'	*tiu-de-*	'lean against a stick'
sina	'sack'	*sina-da-*	'carry a sack'
suala	'ski'	*suala-da-*	'ski'
uŋtu	'tambourine'	*uŋtu-de-*	'play the tambourine'
ñöŋo	'glue'	*ñöŋo-do-*	'cover with glue'
aka(n)	'back'	*akan-da-*	'turn one's back'

8.1.1.3. The suffix -*lA*-

A very frequent suffix -*lA*- incorporates into the verbal stem the noun that denotes a means employed for an action and has either a direct object (490a) or, more often, an instrumental meaning (490b). Some less predictable semantic results are also observed (490c).

(490) a.
anda	'friend'	*anda-la-*	'make friends'
au	'cap'	*au-la-*	'put a cap'
aŋa	'night shelter'	*aŋa-la-*	'make a night shelter'
sita	'child'	*sita-la-*	'adopt'
abu	'father'	*abu-la-*	'consider as a father'

b.	*uniŋa*	'spoon'	*uniŋa-la-*	'scoop with a spoon'
	kusige	'knife'	*kusige-le-*	'stab with a knife'
	aisi	'gold'	*aisi-le-*	'gild'
	to:	'button'	*to-lo-*	'button'
	mä:usa	'gun'	*mä:usa-la-*	'shoot'
	je:	'horns'	*je:-le-*	'butt'
	santu	'fist'	*santu-le-*	'hit with one's fist'
	sa:sa	'palm'	*sa:sa-la-*	'hit with one's palm'
	ob'o	'door hook'	*ob'o-lo-*	'shut the door with its hook'
	cob'o	'handful'	*cob'o-lo-*	'scoop with one's hand'
	t'a:	'fallen tree'	*t'a-la-*	'walk along a fallen tree'
c.	*unugu*	'illness'	*unugu-le-*	'get ill'
	zaŋgä	'boss, leader'	*zaŋgä-la-*	'behave like a boss'
	mamasa	'wife'	*mamasa-la-*	'marry, take a wife'
	aga	'deception'	*aga-la-*	'deceive'
	iŋme	'needle'	*iŋme-le-*	'put a thread in a needle'

Besides, the suffix *-lA-* is regularly hosted by verbal stems borrowed from Russian (1.5.2.2.1), and its function in this case is to adjust the Russian verb to the Udihe derivational system.

8.1.1.4. The suffix *-li-*

The suffix *-li-* is specialized in marking the instrumental relationship between the base noun and the resulting verb, cf.:

(491)	*kuŋkai*	'jaws harp'	*kuŋkai-li-*	'play the jaws harp'
	sou	'scoop'	*sou-li-*	'scoop'
	we:	'mountain'	*we:-li-*	'cross a mountain'

8.1.1.5. The suffix *-si-*

This suffix is quite productive. It is available whenever the base noun signifies some kind of instrument. The instrumental suffix *-si-* additionally conveys the imperfective meaning (cf. the parallel deverbal derivation in 8.2.2.7). The corresponding verbs are aspectually opposed to the perfective verbs derived from the same nouns with the suffix *-lA-* (8.1.1.3): *mäusa-la-* 'shot (once)' and *mäusa-si-* 'be shooting'. Further examples are in (492).

(492) adili   'net'   adili-si-   'net'
     gautu   'hoe'   gautu-si-   'use a hoe'
     coŋki   'tree juice'   coŋki-si-   'collect tree juice'
     dami   'tobacco'   dami-si-   'smoke'
     okto   'medicine'   okto-si-   'get cured'
     xaluga   'hammer'   xaluga-si-   'work with a hammer'

Examples of the non-instrumental meaning are:

(493) sul'ai   'fox'   sul'ai-si-   'lie'
     amba   'evil spirit' amba-si-   'be possessed'
     tal'a   'raw fish'   tal'a-si-   'eat raw fish'
     nakta   'boar'   nakta-si-   'play at being a boar'
     tuŋe   'shaman pole' tuŋe-si-   'make a shaman pole'
     soŋgo   'bear'   soŋgo-si-   'eat bear meat'
                                             (K 287)
     ulikte   'ritual lard' ulikte-si-   'play with ritual lard
                                             (of a shaman)'

This suffix is also attested in Schneider (1936) in the form -gAsi-: batu-gasi- 'go hunting' (derived from the verb batu- 'go hunting'), sunzu-gesi- 'offend, torture', teatri-gasi- 'act in a theatre' (teatri 'theatre'), cf. also mafa-g'asi- 'play bear hunting' (mafa 'bear') (SK 551) and bali-gasi- 'play blind man's buff' (bali 'blind').

8.1.1.6. The suffixes -ŋi- and -ŋisi-

The suffixes -ŋi- or -ŋisi- derive creation verbs from nouns that semantically function as an object of creation. They are exemplified in (494a) and (494b) respectively.

(494) a. xokto   'road'   xokto-ŋi-   'make a road'
        ogdö   'coffin'   ogdö-ŋi-   'make a coffin'
        momugu   'firewood'   momugu-ŋi-   'collect firewood'
        oño   'ornament'   oño-ŋi-   'make ornaments'
     b. co:lo   'grass tent'   co:lo-ŋisi-   'build a grass tent'
        cei   'soup'   cei-ŋisi-   'cook soup'
        kolo   'mittens'   kolo-ŋisi-   'make mittens'
        suala   'ski'   suala-ŋisi-   'make a ski'
        zeu   'food'   zeu-ŋisi-   'cook food'
        site   'child'   site-ŋisi-   'hatch nestlings'
                                               (SK 228)

lala	'porridge'	*lala-ŋisi-*	'cook porridge' (Schneider 1937: 66)
okto	'medicine'	*okto-ŋisi-*	'make some medicine'

Some nouns allow two variants in the derivation of the verb of creation, with the suffix *-ŋi-* and the suffix *-ŋisi-*, for example:

(495)	*au* 'cap'		*au-ŋi-*	'make a cap'
			au-ŋisi-	'make a cap'
	aŋa 'night shelter'		*aŋa-ŋi-*	'build a night shelter'
			aŋa-ŋisi-	'build a night shelter'

The element *-si-* within the suffix *-ŋisi-* is likely to be related to the imperfective verbal suffix *-si-* (8.2.2.7).

8.1.1.7. The suffix *-nA-*

The resulting verb pertains to the acquisition of a particular state (normally of age).

(496)	*sagdinta*	'old man'	*sagdinta-na-gi-*	'become old'
	xatala	'girl'	*xatala-na-*	'become a girl'
	ni:	'man'	*ni:-ne-gi-*	'come to life again'
	lusa	'Russian'	*lusa-na -*	'become russified'
	soŋgo	'bear'	*soŋgo-no-*	'become a bear'
	mo:	'tree'	*mo:-no-*	'become a tree'
	b'ata	'boy, fellow'	*b'ata-na-*	'become grown up (of a boy)'
	ute	'rotten wood'	*ute-ne-*	'molder away, become old'

This suffix also derives subjectless verbs that denote the appearance of a particular natural phenomenon. On subjectless constructions see 14.1.1 and 15.1.4.

(497)	*edi*	'wind'	*edi-ne-*	'blow (of the wind)'
	ima:	'snow'	*ima:-ne-*	'snow'
	gäwa	'dawn'	*gäwa-na-*	'dawn'
	tamña:	'fog'	*tamña:-na-*	'come (of fog)'
	ñaŋma	'cold'	*ñaŋma-na-*	'freeze'
	sogdo	'steam'	*sogdo-no-*	'appear (of steam)'
	sugala	'northern wind'	*sugala-na-*	'come (of the

			northern wind)'
jakpa	'canyon'	*jakpa-na(-gi)-*	'appear (of a canyon)'
züö	'southern wind'	*züö-ne-*	'come (of the southern wind)'
aŋna	'ice crust over snow'	*aŋna-na-*	'appear (of the ice crust)'

8.1.1.8. The suffix *-gi-*

The suffix *-gi-* is clearly identical etymologically to the repetitive suffix of the deverbal derivation (8.2.2.9). It also derives subjectless verbs from nouns with a meteorological or cyclic "calendar" meaning. The subject appears to be incorporated into the verbal stem. Examples are:

(498)	*poute-gi-*	'get dark'
	dogbo-gi-	'come (of night)'
	bolo-gi-	'come (of autumn)'
	tue-gi-	'come (of winter)'
	neki-gi-	'come (of spring)'

8.1.1.9. The suffix *-mu:i-*

The suffix *-mu:i-* is fairly productive. It express the meaning 'smell X' where X corresponds to the base noun. Examples are presented in (499). Example (499b) shows the usage of such verbs.

(499) a.	*sali*	'dead fish'	*sali-mu:i-*	'smell dead fish'
	siŋe	'mouse'	*siŋe-mu:i-*	'smell mice'
	b'ata	'boy'	*b'ata-mu:i-*	'smell boys'
	xuŋna	'mold'	*xuŋna-mu:i-*	'smell mold' (K 307)
	silie	'gall'	*lie-mu:i-*	'smell gall' (SKX 182)

b.   *Bi   aziga-mu:i-mi.*
    me   girl-V-1SG
    'I can smell girls.'

Alternatively, the suffix *-mu:i-* may derive an unchangeable component of a complex predicate which co-occurs with the verb *b'a-pta-* 'smell' (from *b'a-* 'get' and *-ptA-* Decausative). This construction means 'it smells of', for example:

(500) a.   *J'e-mi*   *aziga-mu:i*   *b'a-pta-ini?*
            what-INF   girl-V   get-DEC-3SG
            'Why does it smell of girls?' (SKX 282)

        b.   *Saɲña-mu:i-de*   *e-ini*   *b'a-pta.*
            smoke-V-FOC   NEG-3SG   get-DEC
            'It doesn't smell of smoke.' (SKX 210)

8.1.1.10. Rare suffixes

Examples of non-productive rare suffixes of the denominal derivation of verbs are:

   -di-, -zi-

ogzo-di- 'drive away the evil spirit' (*ogzo* 'evil spirit'); *kumu-di-* 'look for fleas' (*kumu* 'flea'), *ofo-di-* 'pluck' (cf. *ofo-kto* 'feather'); *soŋgo-di-* 'imitate a bear' (*soŋgo* 'bear'), *ceme-di-* 'eat nuts' (*ceme* 'seed'), *soɲdo-zi-* 'be sinful' (*soɲdo* 'sin') (SKX 388);

   -(mu)ktA-

amu-kte- 'defecate' (*amu* 'excrement'); *edi-mukte-* 'be blown by the wind' (SK 1101) (*edi* 'wind');

   -mule-

edi-mule- 'fly with the wind' (*edi* 'wind');

   -fule-

xeŋe-fule- 'kneel' (*xeŋe* 'knee');

   -ŋita-

lauzi-ŋita- 'take as a servant' (*lauzi* 'servant, farm worker') (SKX 320);

   -gbi(le)-

ja:-gbi- 'start seeing, open eyes (for the first time)' (*ja:* 'eyes') (K 242), *xu-gbi(le)-* 'start smelling' (*xu:* 'smell'), *texe-gbi-* 'take root' (*texe* 'root').

8.1.2. Deadjectival verbs

8.1.2.1. The suffix *-nA-*

A fairly frequent suffix that derives verbs from adjectives is *-nA-* (sometimes in combination with the element *-gi-*). The derived verbs mean the acquisition of a quality or a state named by the base adjective.

(501)   *sagdi*   'old'   *sagdi-ne-gi-*   'become old'
        baja   'rich'   *baja-na-*   'become rich'
        gabzi   'cheerful'   *gabzi-ne-gi-*   'become cheerful'
        maŋga   'strong'   *maŋga-na-*   'become strong'
        soligi 'fair (of hair)'   *soligi-ne-*   'become fair'

ede	'weak'	*ede-ne-*	'become weak'
wac'a	'little'	*wac'a-na-*	'become smaller'
c'aligi	'white'	*c'aligi-ne-*	'become white'
xutaligi	'red'	*xutaligi-ne-*	'become red'
xoligi	'yellow'	*xoligi-ne-*	'become yellow'

The same suffix also derives verbs from nouns (8.1.1.7).

8.1.2.2. The suffix *-li-*

The suffix *-li-* expresses the beginning of the state described by the adjective (cf. the deverbal inchoative *-li-*, 8.2.2.1). Verbs in (502a) can take a subject; verbs in (502b) are subjectless.

(502)	a.	*guači*	'bitter'	*guači-li-*	'become bitter'
		xuxi	'smelling'	*xuxi-li-*	'start smelling'
		züi	'sour'	*züi-li-*	'get sour'
	b.	*ñamai*	'hot'	*ñamai-li-*	'get warm'
		xakti	'dark'	*xakti-li-(gi-)*	'get dark'

8.1.2.3. Other suffixes

Some suffixes used to make derivations from nouns (8.1.1) are also employed in the deadjectival derivation, for example:

(503)	*maŋga*	'strong'	*maŋga-la-*	'get exhausted'
	sagdi	'old, large'	*sagdi-ŋi-*	'get old'
	umac'a	'short'	*umac'a-ŋisi-*	'shorten'
	pou-pou	'dark'	*pou-te-gi-*	'get dark'
	diliga	'foolish'	*diliga-di-*	'do foolish things'
	ge:	'bad'	*ge:-de-*	'feel bad'
			ge:- ŋisi-	'blame' (SK 266)
	gojou	'crooked'	*gojou-le-*	'make something crooked'
	ila	'three'	*ila-u-gi-*	'do something for the third time'
	xoŋto	'another'	*xoŋto-ŋisi-*	'transform' (Schneider 1937: 38)

8.2. Deverbal derivation

Deverbal derivation of verbs typically involves a voice-related (8.2.1), an aspectual (8.2.2), or sometimes a modal (8.2.3) meaning. Some of the suffixes of deverbal derivation are very productive and attach to practically every verb. However, such suffixation lacks semantic regularity; it often results in unpredictable semantics, and therefore cannot be regarded as a grammaticalized process.

The deverbal affixes attach to a verbal stem in a particular order. With respect to their position in the verbal form five groups of affixes can be distinguished.

(504)   I. Comitative, and Decausative
      II. Durative, Semelfactive, and Singulative
      III. Imperfective, Distributive, and Diversative
      IV. Directive affix
      V. other modal, Experiential, Reciprocal, Passive, and Causative

Within the verbal form the affixes from positional groups with a lower number are located to the left of those in the groups of a higher number. Typically, within a single word there are no more than two or three derivational affixes, and an affix from a group with a higher number cannot precede an affix from a group with a lower number.

(505)   *ikteme-*'bite'   *ikteme-nde-si-*   'bite a little many times'
                             Semelfactive II + Imperfective III
      koŋko-'hit'   *koŋko-ndo-si-* 'hit a little many times'
                             Semelfactive II + Imperfective III
      wa-   'kill'   *waŋ-na-sa-* 'go to kill (at least on one occasion)'
                             Directive IV + Experiential V
      mede- 'inform'   *mede-mpe-ne-*   'go to get informed'
                             Decausative I + Directive IV

Normally only one affix from each group is present in the word. However, sometimes two affixes from either group II, group III, or group V co-occur within one form.

(506)   *etige-* 'jump'   *xetige-si-kte-* 'jump many times (of several people)'
                             Imperfective III + Distributive III
      susa- 'escape'   *susa-kta-wasi-* 'escape by running in different directions (of several people)'
                             Distributive III + Diversative III
      bi-   'be'   *bi-we-kce-* 'intend to cause to live'
                             Causative V + Intentional V

mamasala- 'marry'		*mamasala-wa-kca-* 'intend to marry somebody'	
		Causative V + Intentional V	

Two suffixes (the Inchoative *-li-* and the Repetitive *-gi-*) do not belong to any positional group and tend to "float" in the word depending on their scope (8.2.2.9.3 and 8.2.2.1.2).

8.2.1. Valence-changing derivation

Suffixation of voice or voice-like affixes changes the valence pattern of the base verb by adding a new argument or reducing existing arguments. The syntax of the voice-related constructions is described in section 16.1. Affixes that express voice distinctions are found within positional groups I and V in the word; that is, they occupy the leftmost (Decausative, Comitative) or the rightmost (Causative, Passive, Reciprocal) position among derivational morphemes. The following deverbal suffixes derive verbs with voice-like meanings.

8.2.1.1. Reciprocal

Morphological Reciprocals are derived from a transitive and in some special cases from an intransitive base with the disharmonic suffix *-masi-* (3.5.1.2). The Reciprocal expresses a symmetrical situation, for at least two-place verbs. Reciprocalization causes a detransitivization of transitive verbs. On the syntax of the Reciprocal construction see 16.1.6.

8.2.1.1.1. Reciprocalization of the direct object

Reciprocals can apparently be formed from most transitive verbs, if the reciprocalized direct object is animate (human). Thus the only constraint on reciprocalization is semantic.

(507)	*ekpi-*	'spray at'	*ekpi-masi-*	'spray at each other'
	bele-	'help'	*bele-masi-*	'help each other'
	saŋtu-	'beat with fist'	*saŋtu-masi-*	'beat each other with fists'
	ñuga-si-	'kiss'	*ñuga-si-masi-*	'kiss each other'
	gida-	'throw a spear'	*gida-masi-*	'throw spears at each other'
	ña:-	'curse'	*ña:-masi-*	'argue with each other'
	b'a-	'find'	*b'a-si-masi-*	'meet each other'
	tugele-	'hug'	*tugele-masi-*	'hug each other'
	mäusa-	'shoot'	*mäusa-masi-*	'shoot at each other'
	galu-	'hate'	*galu-masi-*	'hate each other'
	ŋousi-	'smell'	*ŋousi-masi-*	'smell each other'

8.2.1.2.2. Reciprocalization of other arguments

A third argument of the transitive verbs (other than the direct object) is reciprocalized if it presupposes a human participant. The reciprocalized argument is usually Dative (508a), Lative (508b), or, less frequently, Ablative (508c), Locative (508d), or Instrumental (508e).

<table>
<tr><td>(508)</td><td>a.</td><td>nexu-</td><td>'bring to'</td><td>nexu-masi-</td><td>'bring to each other'</td></tr>
<tr><td></td><td></td><td>bu-</td><td>'give to'</td><td>bu-masi-</td><td>'give to each other'</td></tr>
<tr><td></td><td>b.</td><td>jexe-</td><td>'sing to'</td><td>jexe-masi-</td><td>'sing to each other'</td></tr>
<tr><td></td><td></td><td>kaja-</td><td>'send to'</td><td>kaja-masi-</td><td>'send to each other'</td></tr>
<tr><td></td><td></td><td>teluŋu-</td><td>'tell to'</td><td>teluŋu-masi-</td><td>'tell to each other'</td></tr>
<tr><td></td><td></td><td>xuli-</td><td>'go to'</td><td>xuli-masi-</td><td>'go to each other'</td></tr>
<tr><td></td><td></td><td>dia-</td><td>'say'</td><td>dia-masi-</td><td>'talk to each other'</td></tr>
<tr><td></td><td>c.</td><td>gele-</td><td>'ask from'</td><td>gele-masi-</td><td>'ask from each other'</td></tr>
<tr><td></td><td>d.</td><td>moso-</td><td>'fight with'</td><td>moso-masi-</td><td>'fight with each other'</td></tr>
<tr><td></td><td></td><td>xauntasi-</td><td>'ask (about) from'</td><td>xauntasi-masi-</td><td>'ask (about) from each other'</td></tr>
<tr><td></td><td></td><td>zima-si-</td><td>'go on a visit to'</td><td>zima-si-masi-</td><td>'go on a visit to each other'</td></tr>
</table>

There seem to be no purely grammatical restrictions on reciprocalization. Not all intransitive verbs, however, reciprocalize, even if they involve animate participants and the corresponding reciprocal situation can be imagined. For example, morphological Reciprocals are not possible for the verbs *nagda-* 'get in' (Locative) and *dekte-* 'separate from' (Ablative): **nagda-masi-*, **dekte-masi-*. In general, the semantic condition on intransitive reciprocalization in Udihe is not entirely clear, but the restrictions do not seem to correlate directly with the argument/adjunct status of the secondary element involved in the reciprocal relationship.

8.2.1.1.3. One-argument verbs

In some rare cases, one-argument verbs can undergo morphological reciprocalization with the suffix *-masi-*. The corresponding sentences do not have a reciprocal meaning in the regular sense, but rather describe an action that the two participants undertake alternately (509) or have a sociative meaning ('together'), as in (510).

(509) a.   *Nua-ti   etete-masi:-ti.*
           he-3PL   work-REC-3SG
           'They alternate in their work (that is, one sleeps while the other works, and vice versa).'

b. *Nua-ti*   *utebe*   *bagdi-si-masi:-ti.*
    he-3PL   so   live-IM-REC-3PL
    'They live at each other's place.'

(510) *Teu-ni*   *sauli-masi-li-e-ti.*
      all-3SG   have.feast-REC-INC-PAST-3PL
      'All (of them) started having a feast.' (SKX 264)

8.2.1.2. Causative

The affix *-wAn-* forms causative verbs that belong to morphonological class II (see 7.1). When class II verbs take the Causative suffix *-wAn-* two variants are possible: first, an epenthetic vowel may be inserted between the stem and the suffix (511a); second, the stem-final /n/ may change into /m/, while the Causative suffix appears in the form *-uAn-* (511b).

(511) a. *lagban-a-wan-*   'glue something' (← *lagban-* 'stick to')
        <stick-0-CAUS>

     b. *lagbam-uan-*   'glue something'
        <stick-CAUS>

The second option is the only one mentioned in Schneider (1936). Simonov and Kjalundzjuga (1998–1999: 515) record an intermediate variant *lagbam-uwan-*.

The causative derivation is absolutely regular and productive; there do not seem to be any semantic restrictions on the base verbs that allow causativization with the suffix *-wAn-*. It can be attached to any verb. It has a general causative meaning, that is, it introduces a new agent participant (the so-called "causer") but does not specify the type of causation. A non-productive Causative suffix *-u-* is addressed in 8.2.1.3.4. On the syntax of the Causative construction, see 16.1.4.

8.2.1.2.1. Single Causative

Examples of Causatives:

(512) a. *etete-*   'work'   *etete-wen-*   'cause to work'
        su:le-   'be sick'   *su:le-wen-*   'make sick'
        soŋo-   'cry'   *soŋo-won-*   'cause to cry'
        tukti-   'climb'   *tukti-wen-*   'cause to climb'
        sele-   'wake up'   *sele-wen-*   'wake somebody up'
        zegde-   'burn'   *zegde-wen-* 'set fire'
        i:n-   'enter'   *i:-wen-*   'let in'

b.	*jexe-*	'sing'	*jexe-wen-*	'cause to sing'
	nodo-	'lose'	*nodo-won-*	'cause to lose'
	zawa-	'take'	*zawa-wan-*	'cause to take'
	umi-	'drink'	*umi-wen-*	'cause to drink'
	alasi-	'wait'	*alasi-wen-*	'cause to wait'
	ise-	'see'	*ise-wen-*	'cause to see, show'
	diga-	'eat'	*diga-wan-*	'cause to eat, feed'
	sa:-	'know'	*sa-wan-*	'let know'

The Causative derivation from the intransitive verbs leads to transitivization (512a). However, Causative affixes attached to the null-argument meteorological verbs do not add a direct object (causee) valence, but only a causer valence that corresponds to a subject argument (see 14.1):

(513) *tigde-*   'rain'   *tigde-wen-*   'make rain'

On the intransitive Causatives based on the decausative verbs see 8.2.1.3.1.

8.2.1.2.2. Double Causatives

The only example found for the double Causative is *ŋele-we-si-wen-* 'cause to make afraid' <be afraid-CAUS-IM-CAUS>.

8.2.1.2.3. Causative *-u-*

The non-productive Causative suffix *-u-* found in several verbs is etymologically related to the Passive affix (8.2.5.1). This suffix typically replaces the stem-final /i/ or /e/. Examples (514a) are attested in the modern Bikin dialect, examples (514b) are cited from Schneider (1936), Simonov, Kjalundzjuga, and Xasanova (1998), and Kormušin (1998) for the Northern dialect.

(514) a.	*sa:-*	'know'	*sa-u-*	'make know, inform'
	kese-	'suffer'	*kes(e)-u-*	'torture'
	dala-	'lap'	*dala-u-*	'feed (animals)'
	teti-	'put on (clothes)'	*tet-u-*	'dress somebody'
	ili-	'stand'	*il-u-*	'put'
	ila-	'burn'	*ila-u-*	'kindle'
	tati-si-	'learn'	*tat-u-si-*	'teach'

b.	*ejen-*	'float'	*ejem-u-*	'cause to float'
	ilaktan-	'appear'	*ilaktam-u-*	'cause to appear'
	iñe-	'laugh'	*iñe-u-*	'make laugh'
	solo-	'go upstream'	*solo-u-*	'cause to go upstream'
	sana-	'carry on a burden frame'	*sana-u-*	'make carry on a burden frame'
	aŋa-si-	'make a night shelter'	*aŋa-u-si-*	'invite somebody to spend a night' (SK 121)

The Causative suffix *-u-* seems to precede other affixes of deverbal derivation in the verbal form. In this sense it is similar to the interclass derivation affixes, cf.:

(515) *dala-u-si-* 'feed (several animals)'
<lap-CAUS-IM>
sa-u-ne- 'go to inform'
<know-CAUS-DIR>
kes-u-li- 'start torturing'
<suffer-CAUS-INC>
sa-u-ne-gi- 'go to inform again'
<know-CAUS-DIR-REP>
eje-u-ke- 'make float' (SKX 224)
<float-CAUS-INTN>

Note also that at least some verbs derived with the non-productive Causative *-u-* do not follow the regular syntactic pattern of the Causative constructions (16.1.4): as illustrated below, the second argument of the verb *sa-u-* 'let know, inform' is encoded by the Lative and not the Accusative.

(516) *'Ain-tigi:* *sa-u-je.*
brother-LAT.1SG know-CAUS-IMP.2SG
'Inform my brother.'

8.2.1.3. Decausative

The Decausative is formed with the suffixes *-ptA-/-ktA-* and *-kpi-* from transitives. The Decausative derivation reduces the valence pattern of the base transitive verbs by detransitivizing them. It is not productive and applies only to a closed class of verbs. The syntactic aspect of the Decausative construction is discussed in 16.1.5.

According to Schneider (1936: 141), the element *-tA-* within the Decausative (Reflexive in his terms) suffix *-ptA-* is in fact a Present tense suffix, and apparently (although Schneider does not cite examples for this) it is not present in

other temporal forms. Even if this account is valid historically, in the modern language the suffix *-ptA-* cannot be further segmented and appears in all tenses, as far as our material shows.

Note that reflexive verbs do not have any special morphological marking in Udihe, cf. *asikta-* 'to undress (oneself)', *sele-* 'to wake up', and *digene-* 'to hide oneself'.

8.2.1.3.1. Decausative meaning

Normally the affixes *-ptA-* and *-ktA-* vary freely, for example: *ise-pte-* and *ise-kte-* 'be seen' (see 2.2.4.1 for phonetics). From some verbs two decausative verbs are derived, apparently with the same meaning, one with the affix *-ptA-/-ktA-* and another with the affix *-kpi-*, as shown in (517a). Other verbs (517b) allow only one formal type of the Decausative, either with *-ptA-/-ktA-* or with *-kpi-*. In the examples below only the *-ptA-* variation is shown. However, in practically every case a counterpart with *-ktA-* is also possible.

(517) a.

nodo-	'lose'	*nodo-pto-*		*nodo-kpi-*	'be lost'
kakpali-	'open (a bottle)'	*kakpali-pte-*		*kakpali-kpi-*	'open'
ñientile-	'open (a door)'	*ñientile-pte-*		*ñientile-kpi-*	'open'
ise-	'see'	*ise-pte-*		*ise-kpi-*	'be seen'
mala-	'spend'	*mala-pta-*		*mala-kpi-*	'be spent'
mantila-	'spill'	*mantila-pta-*		*mantila-kpi-*	'be spilled'

b.

xolo-mu-	'leave'	*xolo-pto-*	'be left'
olokto	'cook'	*olokto-kpi-*	'be cooked'
xue-	'cut'	*xue-pte-*	'be cut'
düi-si-	'hear'	*düi-pte-*	'be heard'
kimpi-	'close'	*kimpi-pte-*	'close'
b'a-	'get, find'	*b'a-pta-*	'smell'
zalu-	'fill'	*zalu-pte-*	'be filled'
kampi-	'fold'	*kampi-pte-*	'be folded'
xu-	'make numb (a leg)'	*xu-pte-*	'become numb'

An example of the decausativization of the causative verbs is in (518a) and examples of the causativization of the Decausatives are (518b) and (518c). In the latter case the resulting verb is intransitive but conveys an additional meaning 'appear'.

(518) a. *sa:-*   'know'
           sa-u-   'let know, inform' <see-DEC>
           sa-u-pte-   'be known' <know-CAUS-DEC>
       b. *mantila-*   'spill (transitive)'
           mantila-pta-   'spill (intransitive)' <spill-DEC>
           mantila-pta-wan-   'appear to be spilled' <spill-DEC-CAUS>
       c. *ise-*   'see'
           ise-kte-   'be seen' <see-DEC>
           ise-kte-wen-   'appear' <see-DEC-CAUS>

8.2.1.3.2. Middle meaning

Some verbs with Decausative suffixes have a middle meaning: the process they describe occurs without an external agent argument. For these verbs a corresponding non-derived base verb either does not exist, as shown in (519a), or is intransitive, as in (519b).

(519) a. *zala-pta-*   'bend' (intransitive)
           ze-pte-   'eat greedily (German *fressen*)'
       b. *ña:-*   'get rotten'   *ña-pta-*   'turn sour'
           ŋua-   'sleep'   *ŋua-pta-*   'feel sleepy'

8.2.1.3.3. Inchoative Decausative

The suffix *-gA-* derives a Decausative counterpart of the transitive verbs with the Inchoative suffix *-li-* (see 8.2.2.1), while there is no morphologically unmarked counterpart. The Decausative verb also has the inchoative meaning; that is, it expresses the beginning of a particular state caused by the event signified by the corresponding transitive verb.

(520) *guza-li-*   'tear'   *guza-ga-*   'get torn'
       bukta-li-   'break in two'   *bukta-ga-*   'get broken in two'
       xudu-li-   'dislocate'   *xudu-ge-*   'get dislocated'

8.2.1.4. Comitative

The Comitative suffix *-niŋa-* indicates that the action is performed by at least two equally involved participants together. The comitative verbs, therefore, take only Plural agreement affixes and normally co-occur with the subject in the Plural. The comitative suffix is normally followed by the Imperfective affix *-si-* (8.2.2.7). Examples for the 3rd person Plural are:

(521)   *gusi-niŋa-si:-ti*   'they play together'
        <play-COM-NUL-3PL>
        dian-a-niŋa-si-li-e-ti   'they started talking together'
        <say-0-COM-INC-PAST-3PL>
        soŋo-niŋa-si:-ti   'they cry together'
        jexe-niŋa-si:-ti   'they sing together'
        umi-niŋa-si:-ti   'they drink together'
        oño-niŋa-si:-ti   'they write together'
        ise-niŋa-si:-ti   'they look together'
        te-niŋa-si:-ti   'they sit together'
        kakci-niŋa-si:-ti   'they fry together'
        taŋi-niŋa-si:-ti   'they read together'

The affix *-niŋA-* is etymologically related to the Collective affix employed for some quantifiers (11.1.3).

8.2.1.5. Passive

8.2.1.5.1. Derivation

The passive derivation is marked by the suffix *-u-* (formally identical to the unproductive Causative marker, 8.2.1.3.4). When the suffix *-u-* follows a vowel-final verbal stem it forms a vowel cluster with the stem-final vowel (522a). In the pronunciation of some speakers the vowel cluster tends to be avoided, and is prevented by an epenthetic /w/ (522b), see 3.2.3. In other idiolects the cluster contracts into a long /u:/, especially when speaking quickly, as shown in (522c). For *n*-final verbs the Passive suffix induces the alternation /n/ → /m/ (522d).

(522) a. *ana-*   'push'   *ana-u-*   'be pushed'
          ise-   'see'   *ise-u-*   'be seen'
          wa:-   'kill'   *wa-u-*   'be killed'
          mäusala- 'shoot'   *mäusala-u-*   'be shot'
          akkusi-   'sting'   *akkusi-u-*   'be stung'
          e-   Negative verb   *e-u-*   Negative Passive stem
      b. *ana-*   'push'   *ana-wu-*   'be pushed'
          buge-   'cover'   *buge-wu-*   'be covered'
          umi-   'drink'   *umi-wu-*   'be drunk'
          diga-   'eat'   *diga-wu-*   'be eaten'
      c. *xugi-*   'turn'   *xug-u:-*   'be turned'
          koŋko-   'beat'   *koŋk-u:-*   'be beaten'
          diga-   'eat'   *dig-u:-*   'be eaten'

d.	*dian-*	'say'	*diam-u-*	'be said'
	lagban-	'glue'	*lagbam-u-*	'be glued'

When the Past tense suffix follows the Passive morpheme *-u-*, the latter changes into *-w-* in the intervocalic position (see 3.2.3), as in (523a) The non-intervocalic *-u-* is preserved (523b), while the long *-u:-* gets shortened (523c). Thus in the Past, as in the Present, various free and idiolectal variations occur.

(523) a.   *ana-u-o:-mi* → *ana-w-o:-mi*   'I was pushed'
            <push-PAS-PAST-1SG>

            ana-u-o:-i → *ana-w-o:-i*   'you were pushed'
            <push-PAS-PAST-2SG>

       b.   *ana-wu-o:-mi*   'I was pushed'
            <push-PAS-PAST-1SG>

       c.   *ana-u:-o:-mi* → *an-u-o:-mi*   'I was pushed'
            <push-PAS-PAST-1SG>

The passive form of the verb *wa-* 'kill' may be *wu:-* (< *wa-u-*) in the pronunciation of some speakers.

In the linear order of derivational morphemes the Passive suffix belongs to the positional group V, cf. *zawa-gi-w-o:-ni* 'was taken back' <take-REP-PAS.PAST-3SG>. Yet, in at least two examples in our corpus it precedes an aspectual marker, the Inchoative suffix (524a) and the Experiential suffix (524b), which reflects the scope relationship between them.

(524) a.   *Ele*   *nada*   *koto-du*   *diga-u-li-e-mi.*
            soon   seven   bald-DAT   eat-PAS-INC-PAST-1SG
            'Soon the seven bald ones will start eating me.' (literally: soon I will start being eaten by seven bald men)

       b.   *dogbo-u-se:-ni*
            night-PAS-EXP.PAS-3SG
            'he has waited for the night to come' (SKX 182)

The order of the Passive and the Causative affix typically depends on the order in which the syntactic derivation takes place. In (525a) passivization "precedes" causativization, and in (525b) the relationship is the reverse.

(525) a.   *ña:ma-u-wan-*   'cause to be cursed'
            <curse-PAS-CAUS>

            oño-u:-ŋ-, *oño-u-weŋ-*   'cause to be written'
            <write-PAS-CAUS>

       b.   *eme-wen-e-u-*   'be sent' (SKX 308)
            <come-CAUS-0-PAS>

ende-wen-e-u-   'be touched' (SK 151)
<touch-CAUS-0-PAS>

However, this does not always hold; *oño-u:-ŋ-* may also mean 'be caused to write'. Some sentence examples are cited in 6.1.4.4.

8.2.1.5.2. Function

The passive derivation applies to transitive verbs. On the syntax of the Personal Passive construction see 16.1.1.

At least four passive verbs lack non-passive counterparts, these are *dogbo-u-* 'be caught by the night', *sikie-u-* 'be caught by the evening', *tigde-se-u-* 'be caught by rain', and *gekti-u-* 'be frozen', for example:

(526) a. *dogb-u-o:-mi*   'I was caught by the night'
          <night-PAS-PAST-1SG>
          dogb-u-o:-mu   'we were caught by the night'
          <night-PAS-PAST-1PL.EX>
       b. *sikie-u-ini*   'he is caught by the evening'
          (Schneider 1936: 65)
          <evening-PAS-3SG>
       c. *Toŋofo*   *gekti-w-o:-ni.*
          pond   freeze-PAS-PAST-3SG
          'The pond got frozen.'

These verbs are obviously derivationally related to the null-argument meteorological verbs *dogbo-* 'come (of night)', *sikie-* 'come (of evening)', *tigde-* 'rain', and *gekti-* 'freeze' (cf. also the one-argument verb *gekti-* 'get frozen' used about non-natural objects) that conjugate as non-passive verbs (14.1). However, they lack non-passive transitive counterparts with the same meaning such as *'catch somebody (of night)' or *'freeze somebody'. Thus the passive derivation opens one additional valency for these verbs. The corresponding passive verbs take exclusively animate subjects (cf. adversative constructions in the related language Even, discussed in Malčukov (1995: 21–26)).

8.2.2. Aspectual derivation

Aspectual (*Aktionsarten*) suffixes express various aspectual modifications of the initial verb. They are not grammaticalized to the same extent as the regular aspectual distinctions, such as Progressive or Habitual, which can be derived from virtually all verbs. Aspectual suffixes produce different semantic results

depending on the semantic type of the base verb (telic vs. atelic, etc.) and normally only attach to a restricted class of verbs. They do not change the valence pattern of the verb.

As noted in 8.2, positional group II includes Durative, Semelfactive, and Singulative aspectual affixes. These affixes are therefore found directly after the verbal stem (or after interclass derivation affixes). The affixes of this group express the internal structure of the event to which the corresponding verb refers. Positional group III includes Diversative, Imperfective, and Distributive affixes. They all involve some kind of quantification of the situation. The Experiential suffix belongs to positional group V.

8.2.2.1. Inchoative

The Inchoative affix *-li-* is fairly productive. Inchoative verbs can form a periphrastic construction of Immediate Future (7.10.2). Inchoative verbs in the Past are negated in two formally different ways depending on the scope of the negation (22.3.2.1.2).

8.2.2.1.1. Inchoative meaning

Inchoative applies to the atelic verbs that denote an unbounded situation (a state or activity). The output of this operation expresses the bounding of the situation by indicating its starting point (527a). When applied to telic verbs, the Inchoative rather adds the meaning of expectation about the near future and the internal ability to perform the corresponding action (527b).

(527)	a.	*ŋousi-*	'smell'	*ŋousi-li-*	'start smelling'
		tukti-	'climb'	*tukti-li-*	'start climbing'
		ine-	'dawn'	*ine-li-*	'start dawning'
		galu-	'hate'	*galu-li-*	'start hating'
		belesi-	'help'	*belesi-li-*	'start helping'
	b.	*eki-*	'stop'	*eki-li-*	'be ready to stop'
		tiŋme-	'fall down'	*tiŋme-li-*	'be about to fall down'
		xetige-	'jump'	*xetige-li-*	'be about to jump'
		i:n-	'reach'	*i:n-e-li-*	'be about to reach'

8.2.2.1.2. Position of the Inchoative suffix in the word

The Inchoative affix *-li-* in a word normally follows the affixes from positional groups I (528a), II (528b), and III (528c).

(528)   a.   *ise-pte-li-*   'start being seen'
             <see-DEC-INC>

        b.   *ise-kce-li-*   'start looking (for a long time)'
             <see-DUR-INC>

        c.   *jeukte-si-li-*   'start checking'
             <check-IM-INC>

The mutual position of the Inchoative affix *-li-* and the Repetitive and the Causative suffixes depends on the scope of the Inchoative affix.

(529)   a.   *eme-gi-li-*   'start coming back'
             <come-REP-INC>

             eme-wen-e-li-   'start causing to come'
             <come-CAUS-0-INC>

             tati-wan-a-li-   'start teaching'
             <teach-CAUS-0-INC>

        b.   *ise-pte-li-gi-wen-*   'make it start being seen again'
             <see-DEC-INC-REP-CAUS>

             zegde-li-wen-   'cause to start burning'
             <burn-INC-CAUS>

In (529a) the affix *-li-* takes scope over other affixes and occupies the rightmost position in the word; in (529b) the situation is the opposite.

8.2.2.2. Semelfactive

The Semelfactive is built by means of the suffix *-ndA-*. Normally psych-verbs and verbs of emotions, such as *aju-* 'love', *galu-* 'hate', *agda-* 'be happy', etc., are not compatible with the Semelfactive affix *-ndA-*. The Semelfactive has several meanings.

8.2.2.2.1. Attenuative meaning

The Semelfactive expresses that the action is only performed with a limited intensity and/or for a limited duration by bringing about meanings like 'a little, slightly, for a while', etc.

(530)   *zawa-*   'take'   *zawa-nda-*   'touch a little'
        xetige-   'jump'   *xetige-nde-*   'jump a little'
        tokto-   'hit'   *tokto-ndo-*   'hit a little'
        akpu-   'sweep'   *akpu-nde-*   'sweep a little'
        belesi-   'help'   *belesi-nde-*   'help a little'

| eme- | 'come' | eme-nde- | 'come for a short time' |
| bi- | 'be' | bi-nde- | 'be (a short time)' |

Attaching the suffix *-ndA* to the verb in the Imperative serves to soften the tone of the request, for example:

(531) *Ag'a, düisi-nde j'eu   nixe-ini ba:-la.*
brother listen-SEM   what   do-3SG place-LOC
'Brother, please listen to what is going on outside.' (K 160)

8.2.2.2.2. Semelfactive meaning

When hosted by transitive verbs the Semelfactive suffix expresses a small amount of the affected object:

| (532) | *tama-* | 'pay' | *tama-nda-* | 'pay a little' |
| | *b'a-gi-* | 'find' | *b'a-gi-nde-* | 'find a few things' |

8.2.2.2.3. Punctual meaning

On rare occasions the Semelfactive may express a punctual meaning ('at once').

(533) *simpi-*   'sneeze'   *simpi-nde-*   'sneeze at once'

8.2.2.3. Singulative

The Singulative affix *-lA-* emphasizes that an action took place only once. It is only compatible with telic verbs that denote an internally bound event.

(534)	*tiŋme-*	'fall down'	*tiŋme-le-*	'fall down once'
	ikteme-	'bite'	*ikteme-le-*	'bite once'
	xaluga-	'hit (with a hammer)'	*xaluga-la-*	'hit once with a hammer'

8.2.2.4. Durative

The suffix *-kcA-* expresses the durative meaning. Prototypically, it denotes an action or state that is perceived as a protracted process, lasting for a considerable length of time. Obviously, such a meaning is possible only with atelic verbs. The Durative does not apply to Semelfactive and Singulative verbs.

(535)	*umi-*	'drink'	*umi-kce-*	'drink for a long time'
	uli-	'sew'	*uli-kce-*	'sew for a long time'
	tukti-	'climb up'	*tukti-kce-*	'climb up for a long time'
	ŋousi-	'smell'	*ŋousi-kce-*	'smell for a long time'
	cudi-	'water'	*cudi-kce-*	'water for a long time'
	uli-	'sew'	*uli-kce-*	'sew for a long time'
	diga-	'eat'	*diga-kca-*	'eat for a long time'

The Durative suffix is historically present in the word *wa-kca-* 'hunt' (from *wa:-* 'kill'), lexicalized in the modern language.

The Durative Infinitive regularly functions in certain types of complement embedded clauses (see 20.1).

8.2.2.5. Diversative

The Diversative is marked by the non-harmonizing suffix *-wasi-* (3.5.2).

8.2.2.5.1. Variations in class II verbs

The class II verbs exhibit free variation in the formation of the Diversative. They may demonstrate the following sound change: *n* + *wasi* → *masi*. Thus, the Diversative suffix is for them homonymous with the Reciprocal (8.2.1.1). This option is illustrated in (536a). Alternatively, the Diversative *-wasi-* may attach to the *n*-final stem augmented with the epenthetic vowel, as in (536b).

(536)		*wajan-*	'swim'
	a.	*waja-masi-* <swim-DIV>	'swim in different directions'
	b.	*wajan-a-wasi-* <swim-0-DIV>	'swim in different directions'

8.2.2.5.2. Function

The Diversative is mostly compatible with motion verbs (all the examples present intransitive verbs) when it expresses (disorderly) movement oriented in various directions (537a). Diversative verbs other than verbs of movement express several identical situations that involve different participants, and probably take place in many different ways, or in different locations (537b).

(537)	a.	*pama-*	'get lost'	*pama-wasi-*	'wander'
		tukä-	'run'	*tukä-wasi-*	'run in different

			directions or around something'	
	xuli-	'walk'	*xuli-wasi-* directions'	'walk in different directions'
	susa-	'escape'	*susa-wasi-* directions'	'escape in different directions'
b.	*pala-*	'distract'	*pala-wasi-* ways'	'distract in all possible ways'
	kämbu-	'make a sacrifice'	*kämbu-wasi-* in different ways'	'make sacrifices in different ways'
	ŋousi-	'smell'	*ŋousi-wasi-* places'	'smell in different places'
	dagbu-	'stick'	*dagbu-wasi-* places'	'stick in different places'
	xeŋde-	'step'	*xeŋde-wasi-*	'step in several places'
	xuine-	'dive'	*xuine-wasi-*	'dive in several places'
	teti-gi-	'dress'	*teti-gi-wasi-*	'dress (many people)'

Examples of the use of the Diversative are:

(538) a. *Bi*   *xunazi-le-i*   *eku-wasi-e-mi,*
          me   sister-LOC-REF   stay-DIV-PAST-1SG
          sita-la-i   *eku-wasi-e-mi.*
          son-LOC-REF   stay-DIV-PAST-1SG
          'I stayed with my sister and stayed with my son.'

      b. *Bi*   *we:-tigi*   *wai-lie*   *tukti-wasi-e-mi.*
          me   mountain-LAT   twenty-MULT   climb-DIV-PAST-1SG
          'I climbed the mountain twenty times.'

8.2.2.6. Distributive

Distributive suffixes typically express several instances of a situation within one period of time.

8.2.2.6.1. Distributive -*nA*-

The domain of application of the Distributive suffix -*nA*- is restricted to intransitive verbs. In particular, it regularly applies to the inchoative decausative verb (8.2.1.3.3). It expresses plurality of subjects, or multiple occurrence of the action on the whole (surface) of one object, and in this sense the resulting verbs may be ambiguous.

(539) *tiŋme-* 'fall down' *tiŋme-ne-* 'fall down
(of several objects)'

bukta-ga- 'break' *bukta-ga-na-* 'break (of several
objects)' or 'break in several places'

guza-ga- 'get torn' *guza-ga-na-* 'get torn (of several
objects)' or 'get torn in several places'

kakta-ga- 'crack' *kakta-ga-na-* 'crack (of several
objects)' or 'crack in several places'

For example:

(540) a. *Mo:* *kakta-ga-na:-ni.*
tree crack-DEC-DIST.PAST-3SG
'The tree cracked in several places.'

b. *Zanza* *teu* *tiŋme-ne-ini.*
fence all fall-DIST-3SG
'The fence is all falling down.'

On rare occasions *-nA-* signifies plurality of the subject: *bagdi-ne-gi-e-ti* 'they
returned to where they lived' <live-DIST-REP-PAST-3PL> (SKX 212) or has an
imperfective meaning: *oŋmo-no-* 'often forget' (*oŋmo-* 'forget'). When combined
with the Imperfective *-si-* it creates a complex affix *-nAsi-*: *um-nesi-* 'drink
(constantly)' (cf. *umi-* 'drink'); *xuai-nasi-* 'cut in several pieces' (SK 1002) (cf.
xuai- 'cut').

8.2.2.6.2. Distributive *-ktA-*

The suffix *-ktA-* is the most frequent Distributive suffix. It signifies that the
situation involves several subject participants. The verb takes Plural agreement, so
plurality is marked twice on the verb although the nominal Plural suffixes are not
obligatory (see 4.2.1.2).

(541) *eme-* 'come' *eme-kte-* 'come (of several people)'
bude- 'die' *bude-kte-* 'die (of several people)'
gusi- 'play' *gusi-kte-* 'play (of several people)'
deu- 'get tired' *deu-kte-* 'get tired (of several people)'
do:- 'perch' *do-kto-* 'perch (of several birds)'

The following examples illustrate this Distributive suffix encoding plurality of
subjects.

(542) a.   *Abuga-da*   *anči*   *eniŋe-de*   *anči*   *teu*
father-FOC   no   mother-FOC   no   all
bude-kte:-ti.
die-DIST.PAST-3PL
'No father, no mother, everybody died.'

b.   *Mogz'oi*   *susa-kta:-ti*   *gektin-zi*
naked   escape-DIST.PAST-3PL   cold-INST
bude-kte:-ti.
die-DIST.PAST-3PL
'The naked (people) escaped and died from the cold.' (K 136)

The same affix may sometimes denote a plurality of objects: *eje-u-kte-* 'make many objects float' <float-CAUS-DIST> (SK 1116).

8.2.2.7. Imperfective

For class II verbs the Imperfective suffix *-si-* is attached to the vowel-final stem, while the stem-final /n/ is dropped, cf.:

(543)   *sa-*   'know'   *iñe-*   'laugh'
sa-wan-   'let know'   *iñe-wen-*   'make laugh'
sa-wa-si-   'let know (IM)'   *iñe-we-si-*   'make laugh (IM)'

The Imperfective has a wide range of meanings depending on the semantics of the initial verb.

8.2.2.7.1. Continuous meaning

For atelic verbs the Imperfective normally has a continuous meaning, that is, denotes a process in progress. In (544a) examples of a class I verb and examples (544b) of class II verbs are presented:

(544) a.   *soŋo-*   'cry'   *soŋo-si-*   'be crying'
oño-   'write, decorate'   *oño-si-*   'be making ornaments'
olokto-   'cook'   *olokto-si-*   'be cooking'
b.   *dawan-*   'infect'   *dawa-si-*   'be infecting'
ŋele-wen-   'frighten'   *ŋele-we-si-*   'be frightening'

See also the examples in (545).

(545) *zawa-*   'take'   *zawa-si-*   'hold'
       ise-   'see'   *ise-si-*   'look'

8.2.2.7.2. Multiplicative meaning

When applied to telic verbs the Imperfective suffix typically licenses the multiplicative meaning: it denotes that the situation is repeated several times, typically with the same participants.

(546) *mägdagi-*   'wake up'   *mägdagi-si-*   'wake up several times'

       nagda-   'guess; hit'   *nagda-si-*   'hit several times'
       digan-   'say'   *diga-si-*   'talk'
       xuine-   'dive'   *xuine-si-*   'dive several times'

8.2.2.7.3. Distributive meaning

The Imperfective suffix *-si-* may also express several instances of a situation involving multiple participants, either subjects (547a) or objects of transitive verbs (547b).

(547) a. *camna-*   'break'   *camna-si-*   'break (of several things)'

          tiŋme-   'fall'   *tiŋme-si-*   'fall (of several people)'

      b. *nodo-*   'lose'   *nodo-si-*   'lose many things'
          kakpali- 'open (a jar)' *kakpali-si-* 'open (several jars)'
          tugbu-   'cut (a tree)' *tugbu-si-*   'cut (several trees)'
          buge-   'bury'   *buge-si-*   'bury (several people)'
          bukta-   'break'   *bukta-si-*   'break (several objects)'

Thus, for transitive verbs ambiguity between different meanings may arise, cf. *teti-si-* 'dress many children' or 'dress one child many times' (from *teti-* 'dress'). Examples of the suffix *-si-* expressing plurality.

(548) a. *Ni:-we*   *wa:-si-se.*
          man-ACC   kill-IM-PP.PAS
          'Several people are killed.'
      b. *Mo:-wo*   *anana*   *tugbu-si-se.*
          tree-ACC   long.ago   cut-IM-PP.PAS
          'The trees were cut a long time ago.'

8.2.2.8. Repetitive

The Repetitive affix -*gi*- is fairly productive in its repetitive meaning (8.2.2.8.1). Class II verbs demonstrate the contraction of the stem-final /n/ with the suffix-initial consonant /g/, so the Repetitive suffix has the form -*ŋi*-.

(549) *xektin*-   'jump'   *xekti-ŋi*-   'jump back'
       i:n-   'reach'   *i:-ŋi*-   'reach on the way
                                                     back'
       ejen-   'float downstream' *eje-ŋi*-   'float back
                                                     downstream'
       ilaktan- 'appear'   *ilakta-ŋi*- 'appear again'

8.2.2.8.1. Repetitive meaning

Typically, the Repetitive verb expresses the meaning 'again' or 'one more time' for both telic and atelic verbs. Yet, it does not seem to be compatible with stative psych-verbs. Combined with negation it means either 'nevermore' or 'no longer'.

(550) *xauntasi*- 'ask'   *xauntasi-gi*- 'ask again'
       nodo-   'lose'   *nodo-gi*-   'lose again'
       deu-   'get tired' *deu-gi*-   'get tired again'
       tukti-   'climb up'   *tukti-gi*-   'climb up again'
       nodo-   'lose'   *nodo-gi*-   'lose again'
       ŋua-   'sleep'   *ŋua-gi*-   'sleep again'

The Repetitive suffix is regularly used with verbs that denote putting on or taking off clothes or shoes (in this case these are clothes that have already been worn at least once, that is, are not new), as in (551).

(551) *aula*-   'put on a cap'   *aula-gi*-   'put on a cap'
       lukta   'take off clothes' *lukta-gi*- 'take off clothes'

The verb *bagdi*- 'live' augmented by the Repetitive suffix -*gi*- means 'be born' (*bagdi-gi*-).

8.2.2.8.2. Regressive meaning

The repetitive verbs can mean returning to the previous stage (552a) or movement towards home (552b). This demonstrates that the situation described by the verb with the Repetitive suffix -*gi*- does not have to double completely the previous situation and its participants.

(552) a. *zawa-*   'take'   *zawa-gi-*   'take back'

          tama-   'pay'   *tama-gi-*   'pay debts'

          te:-   'sit down'   *te-gi-*   'sit up'

          bu:-   'give'   *bu-gi-*   'return, give back'

          galakta-   'look for'   *galakta-gi-*   'look for a lost object'

          gele-   'ask'   *gele-gi-*   'ask something back'

      b. *eme-*   'come'   *eme-gi-*   'return (home)'

          belesi-   'help'   *belesi-gi-*   'help carry home'

          tukä-   'run'   *tukä-gi-*   'run home'

          gele-   'call'   *gele-gi-*   'call back, call home'

8.2.2.8.3. Position of the Repetitive suffix in the word

The Repetitive suffix follows most other derivational suffixes, for example, the Directive (553a), and the Semelfactive (553b). The mutual order of the Directive and the Repetitive suffixes is not influenced by their scope, for example *egbesi-ne-gi-* means both 'go again to swim' or 'go to swim again'.

However, the Repetitive precedes the suffixes from positional group V (modal and Causative suffixes), cf. (553c).

(553) a. *etete-*   'work'   *etete-ne-gi-*   'go to work again'

          ise-   'see'   *ise-ne-gi-*   'go to see again'

          galakta-   'search'   *galakta-na-gi-*   'go back to search'

      b. *simi-*   'suck'   *simi-nde-gi-*   'suck a little again'

      c. *tigde-gi-kce-*   'the rain starts and stops again'
          <rain-REP-INT>

          tukä-gi-mu:i-   'want to run back'
          <run-REP-DES>

          ili-gi-kce-   'intend to get up'
          <stand-REP-INT>

          ne-gi-kce-   'intend to put back'
          <put-REP-INT>

          ikteme-le-gi-wen-   'again cause somebody to bite once'
          <bite-SING-REP-CAUS>

          lagba-ŋi-wen-   'cause to glue something again'
          <stick-REP-CAUS>

          bu-gi-wen-   'cause to give back'
          <give-REP-CAUS>

If the scope of the repetitive meaning is wider than the scope of the modal meaning, the only possibility to express this situation is with an additive focus particle (Chapter 12).

(554) *Xai   tukä-mu:i-mi*
      again   run-DES-1SG
      'I want to run again.'

When the scope relationship between two suffixes is irrelevant, both orders are equally possible (555a). Thus, the Imperfective suffix *-si-* either precedes or follows the Repetitive (555b).

(555) a. *eme-kte-gi-*   'come again/back (of several people)'
          <come-DIS-REP>

          eme-gi-kte-   'come again/back (of several people)'
          <come-REP-DIS>

      b. *uli-si-gi-*   'sew many times again and again'
          <sew-IM-REP>

          mägda-gi-si-   'wake up again many times'
          <wake.up-REP-IM>

          tagdi-gi-si-   'pull out again many times'
          <pull.out-REP-IM>

8.2.2.9. Experiential

The only aspectual suffix that belongs to positional group V is the Experiential suffix *-sA-*.

8.2.2.9.1. Function

Experiential verbs express the notion that the event occurred at least once in the past. Consequently the experiential verbs are used only in the Past tense or the Perfect; the Present and Future forms are not acceptable, cf.:

(556) a. *Lali-mi-de*   *gekti-mi-de*   *bude-se:-i*
          starve-INF-FOC   freeze-INF-FOC   die-EXP.PAST-2SG
          gun-e-mi.
          say-0-1SG
          'I thought you had died from hunger and cold.' (SKX 82)

      b. *Bi   Iwana-wa*   *b'agdi-se:-mi*
          me   Ivan-ACC   meet-EXP.PAST-1SG
          '(Once) I met Ivan.'

      c. *Nua-ni   wa:taŋi*   *xuli-s'e*   *ŋene:-ni.*
          he-3SG   just   come-EXP.PERF   go.PAST-3SG
          'He has just come and gone.'

d.   *Bi   xaundasi-na-sa:-mi.*
    me   ask-DIR-EXP.PERF-1SG
    'I was going to ask.'

e.   *Bi   eme-gi-si:*   *nua-ni*   *magazina-tigi*
    me   come-REP-PC.1SG   he-3SG   shop-LAT
    xuli-se:-ni   *xeleba-wa*   *ganga-sa:-ni.*
    go-EXP. PAST-3SG   bread-ACC   buy-EXP.PAST-3SG
    'When I came back he had already gone to the shop and had bought some bread.'

The examples below demonstrate the negative forms of verbs derived with the Experiential suffix, which adds the semantic component 'never before'.

(557) a. *Bi*   *ali-de*   *e-si-mi*   *xuli-se*
      me   when-IND   NEG-PAST-1SG   go-EXP
      Moskva-la.
      Moscow-LOC
      'I have never been to Moscow.'

    b. *Bi   nua-ni*   *xuli:-si-ni*   *e-s'e-i*
      me   he-3SG   go-PC-3SG   NEG-PERF-1SG
      dogdi-gi-se.
      hear-REP-EXP
      'Since he left, I have not heard of him again.'

8.2.2.9.2. Regressive meaning

Schneider (1936) cites examples of the regressive meaning of the suffix -*sA*-: when it denotes movement in reverse following the completion of a corresponding action.

(558) *nexu-* 'take away'   *nexu-se-* 'come back after having taken away'
      ilama- 'bark a tree'   *ilama-sa-* 'come back after having barked a tree'

Such a meaning of the suffix -*sA*- is not attested in modern Udihe. It may have been a misinterpretation by Schneider of the experiential meaning. However, it might arise as an accessory when the experiential suffix co-occurs with the Directive -*nA*- (8.2.3.1) within the same word, cf.:

(559) a. *gegbe-*   'collect'
      gegbe-ne-   'go to collect'
      gegbe-ne-se-   'come back after collecting (for example, mushrooms)'

	b.	*wakca-*	'hunt'
		wakca-na-	'go to hunt'
		wakca-na-sa-	'come back after hunting'
	c.	*zawa-*	'take'
		zawa-na-	'go to take'
		zawa-na-sa-	'come back after taking'

8.2.2.10. Intensive

The intensive suffixes are available but are fairly rarely used. They are not easily combined with other derivational suffixes, including the affixes of deverbal derivation, so a definite conclusion about their positional status cannot yet be made.

8.2.2.10.1. Intensive *-mA-*

The Intensive *-mA-* expresses the intensity of intransitive action.

(560) *tukä-* 'run'   *tukä-ma-* 'run quickly'

   zomi- 'steal'   *zomi-me-* 'steal all the time'

With transitive verbs the same meaning is automatically perceived as referring to an action that affects many objects or a large number of uncountable objects:

(561) *diga-* 'eat'   *diga-ma-* 'eat a lot or everything'

   ugdi- 'warm up (water)'   *ugdi-me-* 'warm up a lot of water'

   saula- 'light (a lamp)'   *saula-ma-* 'light (many lamps)'

   kuŋgede- 'fill in'   *kuŋgede-me-* 'fill in (many objects)'

8.2.2.10.2. Intensive *-ki-*, *-kA-*

The Intensive suffixes *-ki-*, *-kA-* (the distribution of these two variants is not clear) expresses the meaning that a sudden action is carried out to a high degree of intensity. They seem to be formally related to the expressive affix *-k*, which derives the impersonal perfective verbal forms in expressive speech.

(562) a.   *Bi   ŋene:-k*   *nakta-wa*   *ise-ki-e-mi.*
          me   go.PAST-EXPR   boar-ACC   see-EXPR-PAST-1SG
          'I went and saw a boar.'

      b.   *Bi   sin-e-we*   *koŋko-ko-zoŋo-i.*
          me   you-0-ACC   beat-EXPR-FUT-1SG
          'I will beat you.'

      c.   *Si   ŋene-ke-zeŋe-i*   *bu-de*   *xaisi*
          you   go-INT-FUT-1SG   we-FOC   also
          ŋene-ke-zeŋe-u.
          go-EXPR-FUT-1PL.EX
          'You will leave and we will also leave.'

Example (563) suggests that the affix *-ki, -kA* is located after the Causative affix, that is, to the right of the affixes that belong to positional group V:

(563)   *T'osi-wen-e-ke-ze-mi.*
       dream-CAUS-0-EXPR-SUBJ-1SG
       'I will make them dream.'

8.2.3. Modal derivation

Affixes with a modal-like meaning belong to positional groups IV and V, that is, they always occupy the rightmost position among all derivational affixes. Like aspectual suffixes, they do not change the valence pattern of the base verb.

8.2.3.1. Directive

Positional group IV includes the Directive suffix *-nA-*, which is very productive and attaches to virtually every non-stative verb whenever this seems semantically plausible. It means movement directed to performing an action specified by the verb stem.

(564)   *egbesi-*   'swim'   *egbesi-ne-*   'go to swim'
       buge-   'bury'   *buge-ne-*   'go to bury'
       wakca-   'hunt'   *wakca-na-*   'go to hunt'
       tama-   'pay'   *tama-na-*   'go to pay'
       olokto-   'cook'   *olokto-no-*   'go to cook'

As already noticed by Schneider (1936: 141), the suffix *-nA-* expresses the general idea of movement, not necessarily walking. Therefore in some contexts, for example, the verb *buge-ne-* can be translated not as 'go to bury' but as 'fly to bury', 'swim to bury', 'run to bury', etc.

The verbs *wa-* 'kill', *sa-* 'know, learn', *gun-* 'say', and *ja:-* 'do what' have irregular Directive stems *waŋ-na-* 'go to kill', *saŋ-na-* 'go to learn', *guŋ-ne-* 'go to say', and *jaŋ-na-* 'go to do something', respectively.

8.2.3.2. Desiderative

The Desiderative *-mu:i-* typically expresses a wish or the internal (physical) necessity to accomplish a particular action. Most commonly it applies to a restricted group of verbs, that is, verbs that refer to some physical human activity (565a). However, other verbs are not completely excluded either. See (565b), in which case the Desiderative rather has an intentional meaning.

(565) a.
umi-	'drink'	*umi-mu:i-*	'want to drink'
ŋene -	'go'	*ŋene-mu:i-*	'want to go'
iñi-	'laugh'	*iñi-mu:i-*	'want to laugh'

b.
b'agdi-	'meet'	*b'agdi-mu:i-*	'want to meet'
tukä-	'run'	*tukä-mu:i-*	'want to run'
wakca-	'hunt'	*wakca-mu:i-*	'want to hunt'
gada-	'buy'	*gada-mu:i-*	'want to buy'

The subject of desiderative verbs is normally an animate noun. In some cases, however, the intentional Desiderative can pertain to a subjectless situation, as indicated by the next example.

(566)   *Tigde-mu:i-ni.*
        rain-DES-3SG
        'It is going to rain.'

Desiderative verbs do not have a Future tense or Imperative.

Desiderative verbs have a special non-finite form which will be conventionally referred to as the Desiderative noun (DESN in the glosses). It is derived from the Present tense verbal stem with the affix *-mugdi*, which is probably a compound morpheme consisting of the desiderative affix *-mu:i-* and some kind of focus particle *-gdi* (cf. 12.1.1.8). Examples are:

(567)   Class I
        jexe-mugdi   'the one wanting to sing'
        bu-mugdi   'the one wanting to give'
        Class II
        dian-a-mugdi   'the one wanting to say'   <say-0-DESN>

Desiderative nouns do not have a nominal inflection and are used only within copular desiderative constructions where they express a desiderative state (see 17.2.3.2).

8.2.3.3. Intentional

The intentional suffix -*kcA*- has two rather different meanings.

8.2.3.3.1. Intentional meaning

First, it expresses a modal meaning of intention to perform the action, or of being ready to perform it. The action expressed by intentional verbs can be of any character; the derivation in question applies whenever the verb denotes an action that can be carried on intentionally. As with Desideratives, the subject of intentional verbs tends to name a human being.

(568)	*teti-*	'dress'	*teti-kce-*	'intend to dress'
	umi-	'drink'	*umi-kce-*	'intend to drink'
	mä:usala-	'shoot'	*mä:usala-kca-*	'intend to shoot'
	akinda-	'pierce'	*akinda-kca-*	'intend to pierce'
	imana-	'snow'	*imana-kca-*	'be about to snow'
	zegde-li	'start burning'	*zegde-li-kce-*	'be about to flare up'
	sa:-	'know'	*sa-kca-*	'want to learn, to know'

The Intentional suffix is formally homonymous to the Durative suffix -*kcA*- (see 8.2.2.4), but clearly differs from it in semantics.

8.2.3.3.2. Alternating action

Another function of the affix -*kcA*- is to express an action that takes place in an alternating way, which occurs several times in opposite directions, or stops and starts alternately and abruptly.

(569)	*solo-*	'go upstream'	*solo-kco-*	'go upstream and downstream'
	bu:-	'give'	*bu-kce-*	'give and take back'
	tigde-	'rain'	*tigde-kce-*	'rain and stop raining'
	gulin-	'leave'	*gulin-e-kce-*	'start leaving and change one's mind'
	dian-	'say'	*dian-a-kca-*	'start saying and change one's mind'

ŋele-	'be afraid'	ŋele-kce-	'be afraid a little (without being sure)'

An example of the use of the intentional that expresses an action that started taking place, but suddenly stopped.

(570) *Aisi-kca:-ni*   *kiŋde-kiŋde*   *kiŋde-si-e-ni.*
mend-INT.PAST-3SG   break-break   break-IM-PAST-3SG
'As soon as he started mending (it), he broke (it) completely.' (K 111)

The derived verbs with the suffix *-kcA-* are often found in the periphrastic construction of alternating action (7.10.1), although the presence of this affix is then redundant.

8.2.4. Non-productive affixes of deverbal derivation

Examples:
-gde-, -gdi-
jexe-gde- 'hiccup' (*jexe-* 'sing'); *b'a-gdi-* 'meet (each other)' (*b'a-* 'find, get');
  -kule-
susa-kule- 'escape' (*susa-* 'escape');
  -mpA-, -mpi-
mede-mpe- 'ask, inform oneself' (*mede-* 'be informed'); *nodo-mpi-* 'throw away' (*nodo-* 'lose') (SKX 80);
  -lA-
aju:-le- 'admire' (*aju:-* 'like, love');
  -fine-
ekei-fine- 'stop' (SK 1120) (cf. *ekei-* 'stop').

8.3. Verbal compounds

Verbal compounding is not a common type of word formation in Udihe. One fairly productive pattern of compounding is the combination of the semantically "light" verb *b'a-* 'get, receive, find' with a noun or an adjective. Such compounds form fixed lexicalized expressions, which can exhibit non-compositional semantics.

8.3.1. Adjective + *b'a-*

The combination of *b'a-* and certain adjectives produces intransitive compound expressions with the meaning of the acquiring or the beginning of a particular

state. The following list exemplifies all compounds of this type found in our materials:

(571)   *xekui b'a-*   'get warm, burnt'   *sigdi b'a-*   'get angry'
        ñamugdi b'a-   'start laughing'   *safani: b'a-*   'get bored'
        guzi b'a -   'get in a good mood'   *gili b'a-*   'get cold'
        baita b'a-   'become guilty'   *zemui b'a-*   'get hungry'
        jemui b'a-   'get sick'   *kogomui b'a-*   'get thirsty'
        säkpa b'a-   'be beneficial'   *xanaŋ b'a-*   'get sick'
        ge: b'a-   'get offended'   *eŋe b'a-*   'get cold'
        maŋga b'a-   'feel bad' (SKX 326)

Compound expressions of this type are one-place predicates with the experiencer valence; in the clauses the experiencer takes the subject role. The position of the adjective is always strictly before the verb *b'a-* unless in a negative sentence where the negative auxiliary may intervene between the components of the compound expression (573).

(572)   a.   *Pakula*   *gu:zi*   *b'a-ni.*
             Pakula   good.moody   get.PAST-3SG
             'Pakula got in a good mood.'
        b.   *Nua-ni*   *gili*   *b'a-ni.*
             he-3SG   cold   get.PAST-3SG
             'He got cold.'

(573)   *Zemui*   *e-ini*   *b'a.*
        hungry   NEG-3SG   get
        'He is not hungry.'

At least in one example the verb *b'a-* is replaced by the copula *ede-* 'become': *xanaŋ ede-ini* 'he became sick' <sick become-3SG>. In the expression *ŋene-i b'a-* 'prepare to leave' (SKX 126) the verb *b'a-* co-occurs with the impersonal form of the Present active participle of the verb *ŋene-* 'go'.

8.3.2. Noun + *b'a-*

Another compounding type is the combination of the verb *b'a-* 'get' with a noun in the Accusative form. In the Northern dialect, for which the unmarked Accusative is more typical than in the Bikin dialect (4.2.2.2), the object in the corresponding compounds is usually in the Nominative. There are two types of such compounds, which seem to differ in the status of the object noun.

8.3.2.1. Incorporated object

Consider the following compounds:

(574) a. *xekui-we b'a-*   'get hot'
       zuge-we b'a-   'have trouble'
       ligba-wa b'a-   'get a cold in the nose'
       simpi-we b'a-   'get a cough'
       unuge-we b'a-   'catch a disease'
       ñanu-wa b'a-   'cause harm'
       sie-we b'a-   'get a wound'
       baita-wa b'a   'get in trouble'
   b. *bugdi-ne-mi b'a-*   'start walking (of a baby)'
                                  (literally: get self's leg)
       muje-ne-mi b'a-   'realize'
                                  (literally: get self's thought)
       beje-ne-mi b'a-   'reach manhood' (literally: get self's body) (SK 198)

The object here demonstrates a certain independence and syntactic activity. It can sometimes be modified by an adjective (575a) and even by a relative clause (575b). Although the objects in such compounds tend to occupy a strictly preverbal position in the clause, they may be separated from the verb by other elements, or be postposed (575c).

(575) a. *Sagdi*   *baita-wa*   *b'a-ni.*
       big   trouble-ACC   get.PAST-3SG
       'He got into big trouble.'
   b. *Maŋga*   *bude-u-ji*   *unugu-we*   *b'a-mi.*
       severe   die-PAS-PRP   disease-ACC   get.PAST-1SG
       'I caught a severe, fatal disease.' (K 169)
   c. *Ali*   *b'a-ni*   *uti*   *zuge-we?*
       when   get.PAST-3SG that   trouble-ACC
       'When did this misfortune happen to him?'

However, these compounds differ syntactically from the regular combination of the verb with a direct object. The object in them does not passivize, does not control depictives and does not relativize, unlike a regular direct object (15.1.2). Unlike other objects, these compounds cannot be coordinated without repeating the verb. The personal affix can only attach to the object modified by the interrogative pronoun *j'eu* 'which, what, what sort of', as is required by its grammar (see 9.5.1).

(576) *J'eu   ñaŋu-wa-ni   b'a-i.*
     what   harm-ACC-3SG   get.PAST-2SG
     'What harm you cause.' (K 188)

Otherwise, these compound expressions do not allow a possessive object (except for those listed in (574b) which never occur without the reflexive possessive inflection and the Destinative case inflection).

These properties suggest that we are here dealing with an object characterized by a certain degree of incorporation, and that the compound expressions in (574) are transitional in character, being somewhere between a syntactic phrase and a lexical element.

8.3.2.2. Non-incorporated object

The second type of "noun + *b'a-*" compounds include the following ones:

(577) *b'ata-wa b'a-*   'give birth to a boy'
     aziga-wa b'a-   'give birth to a girl'
     sita-wa b'a-   'give birth to a baby'

In all respects the object in such compound constructions behaves like a regular direct object (15.2). It can be modified by an adjective (578a), a numeral, or a relative clause. The object in these compounds takes personal reflexive inflections and the Destinative case (578b) and can also take the Alienable Possessive affix *-ŋi-* (578c).

(578) a.   *Adau*   *b'ata-wa*   *b'a-ni.*
         twin   boy-ACC   get.PAST-3SG
         'She gave birth to twin boys'.
     b.   *Sita-na-mi*   *b'a-ni.*
         child-DEST-REF   get.PAST-3SG
         'She had a baby.'
     c.   *B'ata-ŋi-we*   *b'a-ti*
         boy-AL-ACC   get.PAST-3PL
         'They had a son.' (K 167)

The objects present in such compound constructions can be coordinated without the repetition of the verb *b'a-* (579), or they can be stranded (580) or they can relativize (581).

(579) a.   *Omo*   *b'ata,   omo   aziga   b'a-ti.*
         one   boy   one   girl   get.PAST-3PL
         'They had one boy and one girl.' (K 167)

b. *Aziga*   *b'ata*   *b'a-mi*   *bagdi-e-ti.*
girl   boy   get-INF   live-PAST-3PL
'They lived having a girl and a boy.' (K 141)

(580) *Si*   *mamasa-i*   *j'e-we*   *b'a-ni*
you   wife-2SG   what-ACC   get.PAST-3SG
aziga-wa:-s   *b'ata-wa:-s?*
girl-ACC-DIS   boy-ACC-DIS
'What did your wife have - a girl or a boy?'

(581) a. *Näzakta-la-i*   *b'a-ni*   *b'ata* *j'eu*
brother-LOC-REF get.PAST-3SG   boy   what
aja *bi-ze?*
good   be- SUBJ
'How would a boy born with a brother be nice?'

b. *Bi*   *ise:-mi*   *bi*   *xa:-i*
me   see.PAST-1SG   me   relative-1SG
sita-wa *b'a-ma-ni.*
son-ACC   get.PP-ACC-3SG
'I saw the baby my relative gave birth to.'

These syntactic properties suggest that the status of the object in (577) differs from that in (574). The former demonstrates greater syntactic activity and behaves like a regular direct object, while the latter presents an instance of an incorporated object.

8.3.3. Other compounds

The compounds with the copula 'be' are given in (582a). In (582b) we present compounds with the element *anči-gde* < no-FOC>.

(582) a.   *baita bi-*   'have business with'
       mende bi-   'be unbroken'
       bagä+Possessive affix *bi-*   'hate'
       kesi gele-   'pray about luck'
       sese bi-   'do one's best'
       bude bude-   'die'
       gefuli-gde ŋene-   'disappear (completely)' (SK 243)
   b.   *anči-gde ŋene-*   'disappear (walking)'
       anči-gde tukä-   'disappear (running)'
       anči-gde ise-   'see something disappear'
       anči odo-   'disappear' (SKX 240)
       anči odo-won-   'destroy' (SKX 204)

Examples:

(583) a. *Si   Säŋa   tene   ketu   ge: baita*
          Si   San   CONT   very   bad   business
          bi:-ni   zoŋku-ziga-du.
          be-3SG   poor-PL-DAT
          'And Si San does very bad business with the poor people.'

      b. *Nua-ni   bi   bagä-i   bi:-ni.*
          he-3SG   me   hate-1SG   be-3SG
          'He hates me.'

      c. *Xente-ne-ti   kuti   mafa   aka-wa-ni*
          master-PL-3PL   tiger   old.man   back-ACC-3SG
          anči-gda   ise:-ti.
          no-FOC   see.PAST-3PL
          'Their masters saw the back of the tiger disappear.' (SK 314)

8.4. Zero-derivation

8.4.1. Adjective-to-verb conversion

Examples of suffixless verbal derivation from the adjectives are:

(584) *bogo*   'fat'   *bogo-*   'become fat'
       koŋo   'thin'   *koŋo-*   'get thin'
       maŋga   'strong'   *maŋga-*   'be bad weather, storm'

Such verbs may co-occur with a cognate adjective:

(585) *Ketu   bogo-ŋku   bogo:-ti.*
       very   fat-PL   fat.PAST-3PL
       'They became very fat.' (K 191)

8.4.2. Noun-to-verb conversion

As mentioned in 5.2.1, the direction of the verb-noun/noun-verb zero derivation can only be determined conventionally. The following verbs seem to be derived from nouns with a concrete meaning:

(586) *jue*   'file'   *jue-*   'work with a file'
       kuge   'bellows'   *kuge-*   'work with bellows'
       sugbu   'fish skin'   *sugbu-*   'skin a fish'
       keku   'cuckoo'   *keku-*   'cuckoo'

miki	'small snake'	*miki-*	'crawl'
tama	'price'	*tama-*	'pay'
bono	'hail'	*bono-*	'hail'
lada	'rain with snow'	*lada-*	'rain with snow'
tigde	'rain'	*tigde-*	'rain'
naŋda	'debt'	*naŋda-*	'borrow'
gida	'spear'	*gida-*	'prick with a spear'
		(also: *gida-la-*)	

In the following pairs the nouns, which originally belonged to morphonological class II (4.1.1.2), seem to have lost the stem-final /n/ and moved to class I, while the corresponding verbs preserve the stem-final /n/.

(587)   *tikpe*   'nail'   *tikpen-* 'hammer in'

        tau   'number'   *taun-*   'count'

Chapter 9
Pronouns

This section is based on the following traditional semantic classification of pronouns: Personal pronouns (9.1), Reflexive pronouns (9.2), Reciprocal pronouns (9.3), Demonstrative pronouns (9.4), Interrogative pronouns (9.5), and Indefinite pronouns (9.6). Morphologically and syntactically pronouns fall into four classes: pro-nouns, pro-adverbs, pro-adjectives, and pro-verbs. Each class exhibits the same morphological categories as the regular corresponding grammatical class, as well as a similar syntactic behavior. In a clause, pro-nouns normally function as arguments, adjuncts or modifiers; pro-adverbs as adjuncts; pro-adjectives as modifiers; and pro-verbs are predicates. The latter class is actually very limited in Udihe: there is only one pro-verb.

9.1. Personal pronouns

Personal pronouns are pro-nouns in a strict sense, that is, their morphological and syntactic behavior is similar to that of nouns. They inflect for case and an (Alienable) Possessive. In a sentence, they take an argument position, or function as determiners or adjuncts (rarely as predicates). In principle, their overt presence in the sentence is not obligatory in most functions; for further information on pronoun drop, see Chapter 22.

9.1.1. System of Personal pronouns

There is only one series of Personal pronouns in Udihe: 1 SG *bi* 'me', 2 SG *si* 'you', 3SG *nuani, bueni* 'he/she', 1PL IN *minti* 'we (with you)', 1 PL EX *bu* 'we (without you)', 2 PL *su* 'you', 3 PL *nuati, bueti* 'they'. The pronouns *bueni/bueti* are typical only of the Southern dialect, where they can occasionally be pronounced *bejeni/bejeti*, respectively. Such a pronunciation harks back to their historical origin, from the nominal *beje* 'body' (*beje-ni* <body-3SG>, *beje-ti* <body-3PL>).

The 3rd person Personal pronouns normally refer only to humans, while non-human objects are referred to by Demonstrative pronouns (9.4). On the difference between the 3rd person pronouns *nuani* 'she/he', *nuati* 'they', on the one hand, and *bueni* 'she/he', *bueti* 'they', on the other hand, see 22.1.1.

The pronouns *nua-ni* and *bue-ni* are morphologically complex and include the 3rd person inflection *-ni*. In the Nominative, the form *nua* can occasionally be used instead of *nua-ni* 'he/she' in the Northern dialect, as illustrated in (588).

(588) *Ele   ele   e   bede   bi-mi   nua   muisi:-ni*
      soon   soon   this like   be-INF   he   think-3SG
      jegdige.
      hero
      'The hero immediately thought: this is she.' (K 144)

9.1.1.2. Case inflection

Personal pronouns take regular case inflections, the paradigms are presented below.

(589)   *bi* 1SG   *nua-ni* 3SG   *bu* 1PL EX
            (also: *si* 2SG)   (also: *bue-ni* 3SG) (also:*su* 2PL)
      ACC   *min-e-we*   *nua-ma-ni*   *mun-e-we*
      DAT   *min-du*   *nuan-di-ni*   *mun-du*
      LAT   *min-tigi*   *nuan-tigi-ni*   *mun-tugi*
      LOC   *min-dule*   *nuan-dile-ni*   *mun-dule*
      INST *min-zi*   *nuan-zi-ni*   *mun-zi*
      PROL *min-dili*   *nuan-dili-ni*   *mun-duli*
      ABL   *min-digi*   *nuan-digi-ni*   *mun-dugi*

The declension of the pronouns *minti* and *bue-ti* is not shown here because it is completely identical to the regular declension of class I nouns (4.1.3). Although the pronoun *bue-ti*, historically includes the 3rd person Plural inflection *-ti*, it does not insert case markers between it and the stem; the case markers rather follow the *-ti*. The pronoun *bue-ni* is declined in the same way as *nua-ni*, the pronoun *si* is declined in the same way as *bi*, and the pronoun *su* is declined in the same way as *bu*. Therefore these pronouns are not presented in the paradigms either. The pronoun *nua-ti* 'they' typically behaves like morphologically simplex; so its Accusative form is *nuati-we*. However, it may sometimes decline like *nua-ni*, in which case the case affix is inserted before the 3rd Plural marker *-ti*, so the Accusative *nua-ma-ti* is also acceptable.

Two Personal pronouns have a suppletive *n*-final oblique stem. For the pronoun *bi* 'I' all non-Nominative cases are formed from the oblique stem *min-*, while for the pronoun *bu* 'we (without you)' the oblique stem is *mun-*. In the pronunciation of certain speakers the oblique forms of the pronoun *bi* 'me' are *b*-initial under the analogous influence of the Nominative: *bin-e-we* <me-0-ACC>, *bin-dule* <me-LOC>, etc. The pronouns *si* 'you (SG)' and *su*

'you (PL)' have non-suppletive oblique *n*-final stems, *sin-* and *sun-* respectively. All these oblique stems (*min-*, *mun-*, *sin-*, *sun-*) behave as class II *n*-final nouns (6.1.1) and take the same case inflections as class II nouns. In the Accusative the epenthetic /e/ is inserted between the stem and the case inflections. In the other cases the epenthetic vowel is not present.

For the morphologically complex pronouns *nua-ni, bue-ni* the 3ʳᵈ person inflection *-ni* follows the case marker. Occasionally, however, a form such as *bue-ni-we* <he-3SG-ACC> may also occur. The 3ʳᵈ person inflection may sometimes be absent, but this is rather infrequent: *nuan-tigi* (LAT) (SK 622), *nuan-digi* (ABL). The stem itself is also *n*-final (*nuan-* and *buen-* correspondingly) and behaves like regular class II stems: in the Accusative the stem-final /n/ is not present and the Accusative inflection is *-me-*, in other cases /n/ is overtly present before the case marker.

Personal pronouns lack the Destinative case for obvious semantic and formal reasons: the Destinative is necessarily accompanied by a possessive marker which refers to the potential recipient of the Destinative object (4.2.2.9), such a marker cannot attach to the pronoun, which bears a personal reference by itself. Quite predictably, the Partitive is also lacking; the corresponding meaning is expressed with the postposition *gäundi-ni* (see 10.2.1.3.2).

In the Northern dialect as recorded by Kormušin (1998) the frequent absence of the Accusative marker is attested for nouns (4.2.2.2). In the same way, the Accusative suffix *-we* on the pronouns *bi* 'me' and *si* 'you' may be omitted. The corresponding forms represent the oblique stem augmented by the epenthetic /e/: *min-e* 'me (ACC)' and *sin-e* 'you (ACC)', cf.:

(590) a. *Min-e*   *baŋsal'a.*
       me-0   kick.PERF
       'He kicked me.' (K 112)

    b. *J'eu*   *min-e*   *nuŋkisi:*   *si?*
       what   me-0   bewitch.2SG   you
       'Why are you bewitching me?' (K 113)

    c. *Bi*   *sin-e*   *a:-zaŋa-i*   *ei-ke.*
       me   you-0   catch-FUT-1SG   this-CONT
       'I will catch you anyway.' (K 180)

Case forms of Personal pronouns have basically the same meanings as the corresponding case forms of nominals (4.2.2). As with nominals, Nominative forms can be used attributively, although they are often anaphorically dropped in this function (21.1).

9.1.1.2. Dual form

The oblique *n*-final stem of the Personal pronoun *bi* 'me' followed by the element *zuŋe* 'two, in two, both' (11.1.3), which is phonologically bound and acts here rather as a suffix, produces a complex form *min-zuŋe* 'I with you, we, two of us'. Other pronouns are not attested in such a form. In the subject role the word *min-zuŋe* requires a 1st person Inclusive personal agreement on the verb, for example:

(591) a. *Min-zuŋe*   *zugdi-du*   *amäsa:-fi.*
         me-both   home-DAT   stay.PAST-1PL.IN
         'We stayed at home with you.'

    b. *Min-zuŋe*   *omo*   *škola-la*   *ñansule-fi.*
       me-both   one   school-LOC   study-1PL.IN
       'We study with you in the same school.'

9.1.1.3. Possessive form

The possessive forms of the Personal pronouns are: 1SG *mini-ŋi* 'mine', 2SG *sini-ŋi* 'yours', 3SG *nua-ŋi, nua-ŋi-ni* 'his, hers', 1PL IN *minti-ŋi* 'ours', 1 PL EX *muñu-ŋu* 'ours', 2PL *suñu-ŋu* 'yours', 3PL *nuati-ŋi* 'theirs'. As can easily be seen, these forms are actually oblique pronominal stems, sometimes slightly modified phonologically, augmented by the suffix of Alienable Possessive *-ŋi-* (4.1.4.3).

Possessive Personal pronouns are not used attributively, but only occur in the case position (argument or adjunct) within the headless noun phrase (22.2.3), or as predicative elements in the copular construction (17.2.2.3). They inflect for case in the same way as nouns, and their case forms have the same meanings as the corresponding case forms of nouns (4.2.2). Used as predicative elements in a copular construction, the possessive Personal pronouns are always in the Nominative.

9.2. Reflexive pronouns

Reflexive pronouns belong to the class of pro-nouns. Like Personal pronouns, they are also found in possessive and non-possessive forms and inflect for case. Reflexive pronouns take as their antecedent the subject of the same clause and are obligatory to express coreference with the subject within the clause (see 22.3 for syntactic details and the conditions on reflexivization).

9.2.1. The Nominative form

The Nominative form of the non-possessive reflexive pronoun is *men-e* 'oneself' in Singular and *men-e-men-e* 'themselves' in Plural (/e/ here is an epenthetic vowel). In the subject function the Singular form is often used in the Plural function, as subject agreement in number is not altogether obligatory in Udihe (15.1.1.2.2). In other functions Reflexive pronouns are consistently distinguished for Singular and Plural. The Nominative of the Reflexive pronoun has syntactic functions typical of the Nominative forms of nouns: it appears in the subject position, as a possessive modifier, and as the object of a postposition.

9.2.1.1. Emphatic reflexive function

The Nominative form of the reflexive pronoun is used as an emphatic reflexive in the meaning 'by oneself, by themselves, on one's own'. It indicates that the agent acts independently, or on his/her own, or without being affected by anybody/anything, for example:

(592) a. *Men-e*   *w'a-si*   *j'eu*   *gun-e-i?*
      self-0   kill.PERF-PC.SS   what   say-0-2SG
      'What are you saying after having killed (him) yourself?' (K 195)

   b. *Men-e*   *bagdi-ze-hi.*
      REF-0   live-SUBJ-2SG
      'Live on your own.' (K 129)

   c. *G'ai-ŋi-ni*   *men-e*   *ise-si:-ni,*   *tu:*   *te-ini.*
      crow-AL-3SG   REF-0   see-IM-3SG   all   sit-3SG
      'The crow is sitting (on its own) and looking.' (SK 582)

   d. *Ede,*   *e-zi*   *geh*   *ñexe*   *ami-mi*
      friend   NEG-IMP.2SG   bad   do   father-REF
      ani-mi,   *men-e*   *bagdi-zeŋe-ti.*
      mother-REF   REF-0   live-FUT-3PL
      'Friend, don't do anything bad to you father and your mother, leave them alone.' (SKX 226)

The Plural reflexive pronoun in this function rather has a distributive meaning, that is, 'each (on one's own)'.

(593) a. *Sita-na-ni-de*   *men-e-men-e*   *mamasa-la-gi-si-e-ti.*
      child-PL-3SG-FOC   REF-0-REF-0   wife-V-REP-IM-PAST-3PL
      'Each of his children got married.' (SK 579)

b. *Men-e-men-e*　　*se:*　　*bede*　　*o:si:-ti.*
REF-0-REF-0　　clan　like　become-3PL
'Each of them became like a separate clan.' (Schneider 1937: 28)

c. *Sita-na-ni-de*　　　*men-e-men-e*　　*mamasa-la-gi-si-e-ti.*
child-PL-3SG-FOC　REF-0-REF-0　wife-V-REP-IM-PAST-3PL
'Each of his children got married.' (SK 579)

For an animate antecedent the reflexive pronoun *men-e* is normally followed by the emphatic reflexive element *bejezi*: 'self' (< *beje-zi-i* 'body-INST-REF>). The resulting form *men-e bejezi*: 'oneself, by oneself' follows the nominal, or a Personal pronoun it modifies, and its exact interpretation ('myself', 'yourself', etc.) strongly depends on this head element.

(594) a. *Si　men-e*　　　*beje-zi:*　　　*is'e-i*
you REF-0　　body-INST.REF　see.PERF-2SG
uta-wa?
that-ACC
'Did you see it yourself?'

b. *Bi　mo:-wo*　　*men-e*　　*beje-zi:*
me tree-ACC　REF-0　body-INST.REF
juosi-zeŋe-i.
cut.wood-FUT-1SG
'I will cut the wood myself.'

c. *Uŋta-i-de*　　*men-e*　　*beje-zi:*
boot-REF-FOC　REF-0　body-INST.REF
e-zi　　　*wagi.*
NEG-IMP.2SG　dry
'Don't dry your boots yourself.' (K 109)

d. *Men-e*　　*beje-zi:*　　　*nixe-je.*
REF-0　body-INST.REF　do-IMP.2SG
'Do (it) yourself.'

The same meaning can be rendered by the word *beje-ni* 'self' (<body-3SG>).

(595) a. *Uti*　　　*amä:-la-ni*　　　*beje-ni*　　*ku'ai-la*
that　　after-LOC-3SG　body-3SG　ear-LOC
diaŋ-ki-ni ...
say-PAST-3SG
'After that he himself said to (her) ear ...' (K 139)

b. *Beje-ni-ne*　　　*i:mi*　*esi-ni*　　　*eme?*
body-3SG-CONT　why　NEG.PAST-3SG　come
'Why didn't he come himself?' (K 159)

9.2.1.2. Attributive function

The Nominative form of the reflexive pronoun also functions as an attribute, while the head of the corresponding noun phrase bears the Reflexive Possessive suffix (4.1.4.2).

(596)   a.   *Bi   men-e*   *ugda-na-mi*   *wo:-mi.*
           me   REF-0   boat-DEST-REF   make.PAST-1SG
           'I made a boat for myself.'
      b.   *Guaizima   men-e*   *agdu-ne-mi*   *ile-ini.*
           bear   REF-0   hole-DEST-1SG   dig-3SG
           'The (Himalayan) bear is digging itself a hole.'

The Plural Reflexive pronoun in the attributive function may have a distributive (597) or non-distributive (598) interpretation.

(597)   a.   *Men-e-men-e*   *zugdi-tigi*   *ŋene:-ni.*
           REF-0-REF-0   house-LAT   go.PAST-3SG
           'They went each to his own house.'
      b.   *A:nta   ñ'aula   lauli:-ni*   *men-e-men-e   du:-zi.*
           woman   child   dance-3SG   REF-0-REF-0 way-INST.REF
           'Women and children are dancing, each in their own way.'
      c.   *Men-e-men-e*   *xokto-li-fai*   *a:-ti.*
           REF-0-REF-0   road-PROL-REF.PL   chase.PAST-3PL
           'They chased (them) each along his own road.' (SK 582)

(598)   *Men-e-men-e*   *soktou-ne-fi*   *gada-iti.*
       REF-0-REF-0   bedding-DEST-REF.PL   bring-3PL
       'They bring bedding for themselves.'

Like Personal pronouns, in this use reflexive pronouns can easily be dropped if not emphatic or contrastive (21.2.1).

9.2.1.3. Embedded clause subject

In the embedded participial clause, namely in a relative clause (Chapter 19), a participial complement clause (Chapter 20), or a participial adverbial clause (Chapter 21), the Nominative reflexive pronouns can act as a subject coreferential with the superordinate clause subject, although it can also easily be omitted in this function.

(599) a. *Men-e*   *bi-sin-tigi:*   *eme-gi-kte:-ti.*
       REF-0   be-PP-LAT.SS   come-REP-DIS.PAST-3PL
       'They returned to where they used to live.' (SK 701)

    b. *Men-e*   *teu*   *egze-li:*
       [REF-0   all   understand-INC.PRP.SS
       xi-de   *taŋi-e-mi.*
       till-FOC]   read-PAST-1SG
       'I was reading until I understood everything myself.'

    c. *Men-e-men-e*   *aja*   *gun-ei-tigi:*
       REF-0-REF-0   good   say-PRP-LAT.SS
       ŋene-kte:-ti.
       go-DIS.PAST-3PL
       'They went where they wanted, each on his own.' (SK 932)

9.2.1.4. Reflexive pronoun with postpositions

When a reflexive pronoun functions as the object of a postposition, the postposition takes a reflexive possessive affix.

(600) a. *Men-e*   *kä:la-i*   *te:-i*   *ni:-we*
       REF-0   side-REF   sit-PRP   man-ACC
       ico-zi   *isilo:-ni.*
       elbow-INST   touch.PAST-3SG
       'He touched with his elbow a man sitting next to him.' (SK 580)

    b. *Sugzä:*   *susali-e-ni*   *men-e*   *amä:la-i*
       fish   escape-PAST-3SG   [REF-0   after-REF
       ugda-wa   *taŋda-mi.*
       boat-ACC   carry-INF]
       'The fish escaped carrying the boat after itself.'

    c. *Sina-u-gi-e-ni*   *men-e ojo-lo-i.*
       burden.frame-CAUS-REP-PAST-3SG   REF-0 top-LOC-REF
       'He put (it) on the burden frame on top of himself.'
       (Schneider 1937: 80)

9.2.2. Case inflection

Reflexive pronouns are not opposed for different persons. Cases other than the Nominative are derived from the stem *me(n)-* followed by the case inflection (null for the Accusative) and the following personal inflections: *-i* or *-mi* in the Singular and *-f(e)i* in the Plural. The Singular personal inflection *-mi* is found in the Accusative and the Destinative; in the other cases the inflection *-i* is used, which often contracts with the preceding vowel /i/ (2.3.1). The inflections

-i/-mi (SG) and *-f(e)i* (PL) coincide with the regular reflexive possessive affixes of nouns (4.1.4.2). As distinct from nouns, the Destinative forms are morphologically based on the Dative case. The case paradigms of the reflexive pronouns are:

(601)

	SG	PL
NOM	*men-e*	*men-e*
ACC	*me-m(u)i*	*me-f(e)i*
DAT	*men-di:*	*men-di-fi*
LAT	*men-tigi:*	*men-tigi-fi*
LOC	*men-dile-i*	*men-dile-fi*
INST	*men-zi:*	*men-zi-fi*
PROL	*men-dili:*	*men-dili-fi*
ABL	*men-digi:*	*men-digi-fi*
DEST	*men-di-ne-mi*	*men-di-ne-fi*
	<REF-DAT-DEST-REF>	<REF-DAT-DEST-REF.PL>

Most case-inflected forms of the reflexive pronouns take an argument position and generally cannot be omitted from the clause. Examples of the use of reflexive pronouns are presented in 22.3.1.1.

9.2.3. Possessive forms

Like possessive Personal pronouns, possessive reflexive pronouns are used only in the non-attributive function, that is, mostly in the argument position within a headless noun phrase (22.2.3) or as a final predicate. In the argument position they take the case form of the corresponding argument, and in a predicate function they are used in the Nominative.

Morphologically, the possessive reflexive pronouns are derived from the stem *meni-*, followed by the affix of Alienable Possessive *-ŋi-* (4.1.4.4), and then the case affix (which is null for the Nominative and the Accusative), and the reflexive personal inflection (*-i* for the Singular and *-f(e)i* for the Plural). The Nominative is identical to the Accusative and includes only the stem *meni-*, the affix *-ŋi-*, and the reflexive personal inflections. The Destinative case is lacking. The paradigms of the possessive reflexive pronouns are:

(602)

	SG	PL
NOM-ACC	*meni-ŋi:*	*meni-ŋi-fi*
DAT	*meni-ŋi-di:*	*meni-ŋi-di-fi*
LAT	*meni-ŋi-tigi:*	*meni-ŋi-tigi-fi*
LOC	*meni-ŋi-le-i*	*meni-ŋi-le-fi*
PROL	*meni-ŋi-li:*	*meni-ŋi-li-fi*

| ABL | *meni-ŋi-digi:* | *meni-ŋi-digi-fi* |
| INST | *meni-ŋi-zi:* | *meni-ŋi-zi-fi* |

9.3. Reciprocal pronouns

Reciprocal pronouns (pro-nouns) have only the Nominative and Accusative forms. In functions other than the direct object or the possessive modifier other means are used to convey a reciprocal meaning (on the syntax of reciprocalization see 22.4).

(603) NOM   *men-e-men-e*   'each other's'
      ACC   *mef(e)i-(-mef(e)i)*   'each other'

Morphologically, the Nominative is the reduplicated form of the reflexive stem *me(n)-* and the Accusative goes back to its Accusative Plural form (9.2.2). Reciprocal pronouns must be overtly present in a sentence.

The Nominative reciprocal acts as the possessive modifier, while the Accusative reciprocal functions as the direct object or takes other roles (for further information see 22.4.1). Unlike the Nominative form of the Reflexive pronoun, the Nominative Reciprocal does not occur as a subject or an object of a postposition. It is used either as a possessive modifier (22.4.1.2) or adverbially with the meaning 'separately, each by himself', and 'in different directions', cf.:

(604) a. *Men-e-men-e*   *bagdi:-ti.*
         REC-0-REC-0   live-3PL
         'They live separately (each on his own).'
     b. *Bue-ti*   *men-e-men-e*   *ŋene:-ti.*
         he-3PL   REC-0-REC-0   go.PAST-3PL
         'They left separately.'
     c. *Teu*   *men-e-men-e*   *wesi-e-ti.*
         all   REC-0-REC-0   throw.away-PAST-3PL
         'They threw everything away in different directions.' (SKX 162)

We also have a few examples where the Nominative Reciprocal pronoun indicates the reciprocalization of an oblique object, see 22.4.1.1. However, they do not seem to be regular.

Note that in the Northern dialect as recorded by Simonov and Kjalundzjuga, to the Reflexive pronouns may be derived not only from the reflexive stem *men-e* but also from the stem *za:-* by means of the reflexive possessive affix *-fi* and case affixes.

(605) a. *In'ei-ziga*   *za:-fi-za:-fi*   *ikte-mesi:-ti.*
      dog-PL   REF-PL-REF-PL   bite-REC-3PL
      'Dogs bite each other.' (SK 354)

    b. *Za:-tigi-fi-za:-tigi-fi*   *ana-masi:-ti.*
      REF-LAT-REF-REF-LAT-REF   push-REC-3PL
      'They force each other (to do some work).' (SK 310)

9.4. Demonstrative pronouns

Demonstrative pronouns behave morphologically and syntactically as pro-adjectives: they function either as an attributive modifier, or as a nominalized element within a headless noun phrase. In a modifier function they always precede the head noun and have the Nominative Singular form. On the demonstrative noun phrase see 13.4. The oblique case forms do not function as modifiers but are substantivized and take argument and adverbial roles. The local cases are used as independent local pro-adverbs, which is the only way to form deictic and anaphoric pro-adverbs in Udihe.

Semantically, demonstratives are divided into two major classes, the anaphoric-deictic class and the deictic class. Deictic pronouns cannot function as textual anaphors, while anaphoric-deictic pronouns are used both in deictic and anaphoric roles. In the latter case they have either resumptive or discourse-linking function. In this section we only cite examples for their deictic use, while section 22.1.2 presents instances of anaphora. For both major classes two series are distinguished in terms of the distance from the point of reference: proximal deixis pronouns and distal deixis pronouns. So, Udihe demonstratives fall into four series.

Demonstrative pronouns exhibit case inflection similar to, though still somewhat different from, the inflection of nouns. The formal difference is attested in the Lative case, in which the pronouns have two forms: with the regular inflection *-tigi* or the adverbial Lative inflection *-uxi*, which is also used in adverbial expressions (Chapter 11). As distinct from nouns, demonstratives lack the Destinative and the Partitive case. The paradigms for the demonstrative pronouns are presented below:

(606)   anaphoric-deictic pronouns   deictic pronouns

	proximal	distal	proximal	distal
NOM	*ei, e:* 'this'	*uti, ute, te:, ti:, utauxi* 'that'	*te:ti* '(this one) over here'	*ta:ti* '(that one) over there'
ACC	*a-wa*	*(u)ta-wa*		
DAT	*o-du*	*(u)ta-du*		

LAT	*a-uxi*	*(u)ta-uxi*		
	i-tigi	*(u)ta-tigi*		
LOC	*o-lo*	*(u)ta-la*	*te:ti-le*	*ta:ti-le*
PROL	*o-li*	*(u)ta-li*		
INST	*o-zi*	*(u)ta-zi*		
ABL	*o-digi*	*(u)ta-digi*		

The anaphoric-deictic pronouns referring to persons have a Plural formed with the collective word *getu*, for example, *ei getu* 'these', *uti getu* 'those'. The Plural forms are attested only for the Nominative and the Accusative. The anaphoric-deictic pronouns can take personal inflections, for example: *ei getu-we-fi* 'these of ours (ACC).'

9.4.1. Anaphoric-deictic pronouns

9.4.1.1. Proximal deixis

As can be seen from the table in 9.4, the anaphoric-deictic pronouns of the proximal deixis have suppletive stems: *ei* in the Nominative, *a-*, *i-* or *o-* in other cases. The stem *i-* is likely to be the result of assimilation of the stem vowel to the following case inflection, containing the vowel /i/. The stem *ei* can perhaps be interpreted phonologically as *ai* or *oi*, since all non-high vowels are neutralized to /e/ in the position before /i/ (2.1.3). In this case the pronominal stem can simply be reconstructed as *a-/o-*, and in the Nominative it appears to be augmented by a certain element *-i*.

The pronouns of the series *ei* can be used anaphorically, although this is not their main function and textual anaphora is more often expressed by the *uti/ute/tei/ti:* pronouns (9.6.2). Examples of the anaphoric use of the pronoun *ei* are presented in 22.1.2.

Nominative forms can only function as modifiers or arguments of postpositions, for example, the postposition *bede* 'like'.

(607) a.   *Ei*   *bede*   *e-u*   *dian-a.*
           this   like   NEG-PRP.PAS   say-0
           'One shouldn't speak like this.'
     b.   *Ei*   *egdi-laŋki-ni*   *wa:-i.*
           this   much-ADJ-3SG   kill.PAST-2SG
           'You have killed so much (of it).'

It is also found within several "frozen" expressions, such as *ei zulieni* 'up to now, so far' (*zulie-ni* <before-3SG>), *ei diŋki-ni* 'this size', *eineŋi* < *ei neŋi-ni* <this day-3SG>'today', and *ei tene* 'now' (*tene* is a contrastive particle, see 12.1.1.5).

The Nominative pronoun *ei* may have a non-demonstrative function and then pertain to the organization of the text or the utterance. In this case its closest equivalent in English would be 'now' or 'so'.

(608) a. *Ei*   *ŋene-ze-mi*   *bi*   *anda-tigi:.*
now   go-SUBJ-1SG   me   friend-LAT.REF
'Now I will go to my friend.' (K 133)

     b. *Ei*   *geje*   *ŋene-zeŋe-i*   *Kanda* *mafa-tigi.*
now   together   go-FUT-2SG   Kanda old.man-LAT
'Now you will go together (with me) to the old man
Kanda.'

Oblique case forms are used in an argument position. Example (609) shows the Accusative case.

(609) *A-wa*   *e-zi*   *zawa.*
this-ACC   NEG-IMP.2SG   take
'Don't take this.'

Local cases function as pro-adverbs *o-du* 'here', *a-uxi* 'to here', *o-lo* 'here', *o-li* 'here (along this place)', *o-digi* 'from here', cf.:

(610) a. *Bi*   *o-digi*   *ta-uxi*   *ŋene:-mi.*
me   this-ABL   that-LAT   go.PAST-1SG
'I went from here to there.'

     b. *Si*   *o-li*   *ŋene-je*   *bi*   *ta-li*
you   this-PROL   go-IMP.2SG me that-PROL
ŋene-ze-mi.
go-SUBJ-1SG
'You go here and I will go there.'

9.4.1.2. Distal deixis

These pronouns have two stems in all case forms, namely with or without the initial *u-*: *uta-/ute/uti* and *ta-/ti:/tei*. There is no apparent semantic difference between the pronouns based on these two stems. The stems *uta-* and *ta-* appear in the oblique cases, while the forms *uti/ute* (sometimes also *uta*) and *tei/ti:* show up in the Nominative and are completely interchangeable as free phonological variants.

The *ute/uti/ti:/tei* pronouns are the regular means of textual anaphora in Udihe. The anaphoric function of the pronouns *ute/uti/ti:/tei* is studied in 22.1.2. The local cases usually refer to inanimate objects, while the non-local cases may refer to animate objects as well.

Like the proximal pronouns, the distal deixis pronouns in the Nominative are used either as prenominal determiners or in the argument position. The first case is illustrated in (611), the second case is illustrated in (612).

(611)   *Ti:*   *moxo-zi*   *umi-je.*
        that   cup-INST   drink-IMP.2SG
        'Drink from that cup.'

(612)   a.   *J'eu*   *bi:-ni*   *uti?*
             what   be-3SG   that
             'What is that?'
        b.   *J'eu*   *dele   ni:-ni*   *eme:-ni?*   *Uza*
             what   CONT   man-3SG   come.PAST-3SG   Uza
             uti.   *J'e-we-de*   *e-ini*   *sa:*   *uti.*
             that   what-ACC-IND   NEG-3SG   know   that
             'Who was this person who came? This was Uza, he does not
             understand anything.' (K 112)

Case forms other than the Nominative cannot be used as attributes. Local cases function as pro-adverbs of distal deixis: *(u)ta-uxi* 'to there', *(u)ta-du* 'there', *(u)ta-la* 'there', *(u)ta-li* 'there (on that place)', *(u)ta-digi* 'from there'. Example (613a) illustrates the deictic use of the demonstrative pronoun in the Ablative. Example (613b) shows that the substantivized pronouns *ei* and *ute* are both in the Accusative case and are both used deictically, that is, with a direct indication of their extra-linguistic referents.

(613)   a.   *Ta-digi*   *e-zi*   *xebu.*
             that-ABL   NEG-IMP.2SG take
             'Don't take it from there.'
        b.   *Bi*   *a-wa*   *xebu-zeŋe-i*   *si*   *uta-wa*
             me   this-ACC   take-FUT-1SG   you   that-ACC
             xebu-je.
             take-IMP.2SG
             'I will take this one, you take that one.'

9.4.1.3. Non-demonstrative function

Anaphoric-deictic pronouns of proximate and distal deixis are often used in parallel constructions that denote two identical situations. Their meaning in this case is not demonstrative.

(614) a. *Ta-wa*   *tokto-nd'o*   *a-wa*
        that-ACC   hit-SEM.PERF   this-ACC
        tokto-nd'o.
        hit-SEM.PERF
        'He hits one, he hits another one.'

    b. *Te:*   *bede*   *tand'a*   *e:*   *bede*   *tand'a.*
        that   like   pull.PERF   this   like   pull.PERF
        'He pulled like this and like that.' (K 163)

    c. *I-la*   *ta-la*   *koskoskoskos*   *j'eu*
        this-LOC   that-LOC   INTER   what
        dele   *etete-ini*   *gune.*
        IND   work-3SG   EV
        'Here and there somebody is working making noise.' (K 144)

    d. *Te:*   *bede*   *e:*   *bede*   *dian-a-i.*
        That   like   this   like   say-0-PRP
        'He speaks of one thing and another.'

The following parallel constructions are "frozen", so that the order of the elements cannot be changed: *te:-le o-lo* (LOC), *au-z'e-fe tau-z'e-fe* (ACC) or *i-la ta-la* (LOC) 'here and there'; *ta-uxi a-uxi* (LAT) 'hither and thither'.

9.4.2. Deictic pronouns

Deictic pronouns are attested in our corpus only in the Nominative and Locative cases. They are only used deictically when pointing directly at an object. Syntactically, they behave either as spatial adjuncts (615) or (less frequently) as an attribute (616).

(615) a. *Xokto-li*   *cul*   *ŋene:-ni*   *ta:ti*
        road-PROL   straight   go.PAST-3SG   that
        dieze-le-ni   *ise:-ni*   *mo:-wo.*
        depth-LOC-3SG   see.PAST-3SG   firewood-ACC
        'She went straight ahead along the road and over there in the depth she saw firewood.' (K 140)

    b. *Sita*   *eme-gi-e-ni*   *bebi,*   *sita*
        son   come-REP-PAST -3SG   EV   son
        bebi   *te:ti.*
        EV   this
        'Our son came, apparently, apparently this is our son.' (K 199)

c. *Te:ti-le*   *bie*   *mo:.*
   that-LOC   be.PRES.HAB   tree
   There is a tree over here.'

(616) *Bi*   *ise:-mi*   *ta:ti*   *mo:-wo.*
       me   see.PAST-1SG   that   tree-ACC
       'I have seen that tree.'

9.5. Interrogative pronouns

Interrogative pronouns may be pro-nouns (9.5.1), pro-adjectives (9.5.2), pro-adverbs (9.5.3), and pro-verbs (9.5.4). This section deals only with their morphology and basic meanings; further examples of their use can be found in section 23.1 on questions.

9.5.1. Interrogative pro-nouns

Two basic forms of Interrogative pronouns are *j'eu* 'what' for an inanimate antecedent, and sometimes for an animate antecedent as well, and *ni* 'who', which is only used for an animate antecedent. The pronoun *ni* 'who' takes case forms completely identical to those of the almost homonymic noun *ni:* 'man' on which it is based. These forms are the regular case forms for class I nouns (see 4.1.3). Most case forms of the stem *j'e-* are derived as regular class I nouns, with the exception of the Lative case which takes the adverbial inflection *-uxi*, the adverbial Ablative in *-zeŋezi,* and the adverbial Accusative in *'-fe.* The case forms are:

(617) *j'eu*   (NOM)   'what'
       j'e-fe   (ACC)   'what; where, on which place'
       j'e-we   (ACC)   'what'
       j'e-du   (DAT)   'where'
       j'e-le   (LOC)   'where'
       j'e-uxi   (LAT)   'where to'
       je-digi   (ABL)   'from where'
       j'e-zeŋezi (ABL)   'from what side'
       j'e-li   (PROL)   'where (on which place)'

The Destinative forms include different personal inflections, for example: *j'e-ne-mi* 'what for oneself', *j'e-ne-fi* 'what for themselves', *j'e-ne-i* 'what for you', *j'e-ne-ni* 'what for him' etc. There is also the locational noun *j'e-ze* 'what side', where *-ze* is a derivational suffix (5.1.2.4). Thus, the case paradigm of the pronoun *j'eu* exhibits formal similarities with the adverbial case paradigms

(10.1). Other forms derived from the interrogative stem is the adjective *ja-ma* 'what sort of' (*-ma* is an adjectival derivational affix, see 6.4.1.2.1), and the noun *j'eu-ze* 'which side' (*-ze* is an nominal derivational affix, see 5.1.2.4).

In quick speech the *j'e*-initial forms are often pronounced with an initial *ji*- or simply as *i:*- (2.1.4.3). For example, the Dative form may be pronounced either as *j'e-du*, or as *i:-du*, and the Locative form can be *j'e-le* or *i:-le*, etc.

9.5.1.1. Interrogative function

Interrogative pro-nouns function as *wh*-question words (23.1.1). Syntactically they may act as nominal modifiers within the *wh*-phrase. In this function they are uninflected and precede the head noun, which must take the 3rd person personal inflection *-ni*, similar to the possessive phrase with a nominal modifier (13.1). Attributive agreement in case or number is normally absent. However, we have one counter-example at our disposal (619).

(618) a. *J'eu*   *xokto-wo-ni*   *ise:-i si?*
         what   footstep-ACC-3SG   see.PAST-2SG you
         'Whose footsteps did you see?'

     b. *Ni*   *aziga-ŋi-ni*   *eme:-ni?*
         who   girl-AL-3SG   come.PAST-3SG
         'Whose girl came?'

(619) *J'eu-zeŋezi*   *bi'asa-digi-ni*   *o-lo*   *ihn-e-i?*
       what-ABL   river-ABL-3SG   this-LOC   come-0-2SG
       'From which river did you come here?' (SK 1108)

Used as independent *wh*-words interrogative pro-nouns inflect for case. Non-Nominative forms express various *wh*-questions in argument and adverbial positions (23.1.1). In the subject function the pronoun *j'eu* 'what' in the Nominative triggers Singular agreement on the verb, while the pronoun *ni* 'who' may trigger both Singular and Plural agreement. Apart from its regular meaning ('to what'), the Dative form *j'e-du/i:-du* can mean 'why, what for'. The pronoun *j'eu* 'what' in the Nominative also means 'why' or 'what for' (as in Russian where *čto* 'what' can mean 'why, what for' in a colloquial speech), cf.:

(620) a. *J'eu*   *dieze-tigi*   *gaisi:-ni*   *min-e-we?*
         what   depth-LAT   call-3SG   me-0-ACC
    '   Why is he calling me in the depth?' (K 140)

     b. *Si*   *j'eu*   *ketu*   *go:*   *bi:?*
         You   what   very   long   be.2SG
         'Why were you so long?' (K 146)

Repetition of the pronoun *j'eu* or *j'e-we* intensifies the question, cf.: *j'eu j'e-le-ni* 'where on earth' <what what-LOC-3SG>, *j'eu j'e-we-ni* 'what on earth' <what what-ACC-3SG> (SK 424), cf. also:

(621) *J'e-we*   *jemi*   *zexule-i?*
what-ACC   why   behave.badly-2SG
'Why on earth do you behave so badly?' (SK 337)

The Lative form *j'eu-xi* may be used in the meaning 'which of (them)'.

(622) *J'eu-xi*   *zauŋa?*
what-LAT   greenling
'Which of (these) greenlings?' (SK 345)

9.5.1.2. Universal meaning

The repeated Interrogative pronoun *j'eu j'eu* in a corresponding case form can have a universal meaning ('everything' as in (623)) or a 'free-choice' meaning ('whatever', as in (624)). Cf. also *j'eu j'eu i:-ni* 'everything' where *i:-ni* can go back to the same interrogative stem *j'eu*.

(623) a. *J'eu*   *j'eu*   *wo-jo.*
     what   what   do-IMP.2SG
     'Do everything.'
   b. *Lusa*   *j'eu*   *j'eu*   *xebu-i.*
     Russian   what   what   bring-PRP
     'The Russians bring everything.'
   c. *J'eu*   *j'eu*   *kukpu-ni*   *teu*   *uti*   *doni-ni*
     what   what   bug-3SG   all   that   in-3SG
     bie   *gune.*
     be.PRES.HAB   EV
     'Apparently, there is everything, all sorts of insects inside it.'
     (K 191)

(624) *J'e-we*   *j'e-we*   *wo:-mi*   *ge:*
what-ACC   what-ACC   do-INF   together
ge: *wo:-ti.*
together do.PAST-3PL
'Whatever they were doing, they were doing it together.' (K 114)

The repeated interrogative adjective *ja-ma* means 'all, all sort of'.

(625) *Ja-ma*　　　 *ja-ma*　　　 *xazu-i*　　　 *zawa-i.*
what-ADJ　　　 what-ADJ　　　 belonging-REF take-PRP
'They took all their belongings.'

9.5.1.3. Tag question function

The pronoun *j'eu* in the Nominative can express a tag question. The verb may be either in the affirmative or in the negative form. The pronoun is typically used sentence-finally, however in (626e) it precedes the verb.

(626) a. *Em'e-i*　　　　　　 *j'eu?*
　　　　　come.PERF-2SG　　 what
　　　　　'You came, didn't you?'

　　 b. *Ña*　　　 *xonto-wo*　　 *galakta-mi*　　 *ge:*　　 *j'eu?*
　　　　　more　　 another-ACC　 look.for-INF　 bad　　 what
　　　　　'It is not bad to look for another one, is it?' (K 174)

　　 c. *Emus'e*　　 *bi:*　　　　　 *j'eu?*
　　　　　alone　　　 be.2SG　　　　 what
　　　　　'You live alone, don't you?' (SK 427)

　　 d. *Bi*　 *mamasa-i*　　 *e-s'e-i*　　　　　　　　 *ise*　　 *j'eu?*
　　　　　me　 wife-1SG　　　 NEG-PERF-2SG　　　　　 see　　 what
　　　　　'You didn't did my wife, did you?' (SK 428)

　　 e. *ŋene-mi*　 *j'eu*　　 *maŋga*　 *bi-s'e?*
　　　　　go-INF　　 what　　 strong　　 be-PERF
　　　　　'It wasn't difficult to go (there), was it?' (SK 428)

9.5.1.4. Substantivization

The pronoun *j'eu* when substantivized can mean 'things, belongings, property', as illustrated in the following example:

(627) *Sita-na-fi*　　　　　 *j'e-ne-fi*　　　　　　 *b'a-mi*　　 *teu*
　　　 child-DEST-REF.PL　 what-DEST-REF.PL　 get-INF　　 all
　　　 ute　 *bagdi-e-ti.*
　　　 that　 live-PAST-3PL
　　　 'Having had children and property they carried on living.' (K 200)

9.5.2. Interrogative pro-adjectives

Some of the interrogative adjectives are derived from the *j'e-* base while others are from adverbial interrogative stems (9.5.3). These are:

(628)   *adi*   'how many, how much'

  ja-ma   'made of what'   <what-ADJ>
  ono-fi   'what sort of'   <how-ADJ>
  ali-fi   'what sort of, from what time'   <when-ADJ>
  adi-(n)ti   'which (in number)'   <how.many-ORD>
  adi(-ma)   'how many, how much'   <how.many-ADJ>
  adi-te   'how many to each'   <how.many-DIST>
  adi-t'e   '(only) how many'   <how.many-REST>
  adi-niŋa   'how many (together)'   <how.many-COL>
  wogdime   'how many'

Syntactically, these elements behave like other pronominal modifiers (13.4).

The repetition of the adjective *adi(ma)* causes the indefinite meaning: *adi(ma) adi(ma)* 'several', or the distributive meaning: *adi adi* 'how many to each'. Note also *ono-bui-ono-bui* 'various'.

9.5.3. Interrogative pro-adverbs

Independent interrogative pro-adverbs are not formed from the stem *j'eu* but have different bases. The following interrogative pro-adverbs are observed: *ali* 'when', *ono* 'how', *adi-lie* 'how many times' <how.many-MULT>, *imi* 'why', *jaŋ-na-mi* 'what for' <what-DIR-INF> (the latter two perhaps go back to the Infinitive form of the interrogative pro-verb). Pro-adverbs are morphologically unchangeable. The adverb *ono* with the Present participle of the verb 'be' forms a frozen expression *ono bi:*, *ono bie* 'what sort of'.

(629)   *Ono*   *bie*   *mamasa-wa*   *gala-i?*
        how   be.PRES.HAB   wife-ACC   look.for-2SG
        'What sort of wife are you looking for?' (K 173)

9.5.4. Interrogative pro-verb

The interrogative pro-verb (the only pro-verb found in Udihe) has a stem identical to the Interrogative pronouns: *ja-/i:-* 'do, do what' (glossed as PROV). Morphologically and syntactically it behaves completely as a verb. It has basically the same categories (mood, tense, aspect, etc.) as regular verbs (see Chapter 7). Further examples of the use of the interrogative pro-verb can be found in section 23.1.1.3.

Co-occurring with the Interrogative object pronoun the pro-verb often means simply 'do', while the pronoun means 'what' (630). However, Indefinite pronouns may be absent and then the interrogative verb itself takes the meaning 'do something, do what' (631).

(630) *J'e-we*   *ja:-i?*
what-ACC   PROV.PAST-2SG
'What were you doing?

(631) a. *Ono*   *ñixe-ze-mi*   *bi*   *i:-te-mi-ne?*
how   do-SUBJ-1SG   me   PROV-PERM-1SG-CONT
'How shall I do (it), what shall I do?' (K 185)

   b. *Eniŋe*   *sita-i*   *muñeli:-ni,*   *e-ini-de*
mother   child-1SG   sorry-3SG   NEG-3SG-FOC
olokto-won-o,   *e-ini-de*   *ja-wan-a.*
cook-CAUS-0   NEG-3SG   PROV-CAUS-0
'The mother feels sorry for her daughter, she does not force her to cook, she does not force her to do anything.'

The fixed expression *ono ja:-?* (where *ono* 'how') usually means 'what's going on with ...?', 'what's happening with ...?'.

(632) a. *Si-ne*   *ono ja:-i?*
you-CONT   how PROV.PAST-2SG
'And what is going on with you?' (K 157)

   b. *Ono*   *ja:-ni*   *sul'ai?*
how   PROV.PAST-3SG   fox
'What happened to the fox?' (K 154)

   c. *'Aga*   *ono*   *ja-za-fi?*
brother   how   PROV-SUBJ-1PL.IN
'Brother, what will happen to us?' (K 151)

Used in other morphological forms, the interrogative verb can add various nuances to the verbal phrase, such as 'what for', etc., see 23.1.1.3.

9.6. Indefinite pronouns

Four regular series of Indefinite pronouns exist in Udihe: specific Indefinite pronouns, non-specific Indefinite pronouns, universal (free-choice) Indefinite pronouns, and negative pronouns. All of them are morphologically based on Interrogative pronouns (9.5). In most cases the interrogative elements are followed by the cliticized indefinite particles (on the definition of clitics in Udihe see 3.5.3.1).

9.6.1. Specific Indefinite pronouns

Specific Indefinite pronouns are used if the referent of the pronoun is not known to the speaker and cannot be identified by him/her, or when the speaker does know the referent but prefers not to reveal it to the listener. Normally they correspond to the English Indefinite pronouns of the series *some-*, and to the Russian pronouns of the series *-to*.

Specific Indefinite pronouns are derived from practically all Interrogative pronouns (pro-nouns, pro-adjectives, and pro-adverbs) by means of the indefinite clitic particle *-kA* or *-kAi* (these forms are free variants), e.g.: *j'eu-ke* 'something', 'some', *ni-ke* 'somebody', *adi-ke* 'some quantity', *imi-ke* 'for some reason', etc. On the use of the particle *-kA* as a focus clitic see 12.1.1.11.1. The indefinite particle occurs before the Accusative case inflection: *j'eu-kei-we* 'something (ACC)'. In the other cases it is located in the word after the case inflection, for example: *j'e-du-ke* (DAT), *ni-zi-ke* (INST), *j'eu-xi-ke* (LAT), *ni-du-ke* (DAT).

The following examples illustrate the use of indefinite specific pronouns inflected for the Instrumental (633a) and (633b), the Lative (633c), (633d), and the Ablative (633e).

(633) a. *Nua-ni*   *ni-zi-ke*   *dia-si:-ni.*
      he-3SG   who-INST-IND   say-IM-3SG
      'He is talking to somebody.'

    b. *Ni-zi-kei*   *omo-si-ge-si*   *nitine-ini*
      who-INST-IND   one-V-PERF-PC.SS   gossip-3SG
      min-e-we.
      me-0-ACC
      'Having gathered together with somebody he gossips about me.'

    c. *Ku'ai-tigi-ni*   *j'eu-ke*   *diaŋ-ki-ni*   *Pakula.*
      ear-LAT-3SG   what-IND   say-PAST-3SG Pakula
      'Pakula said something in his ear.'

    d. *J'eu-xi-ke*   *j'e-uxi-ke*   *susa:-ni ni-de*
      what-LAT-IND   what-LAT-IND   escape.PAST-3SG
      ei *sa:.*
      who-IND NEG   know
      'He escaped somewhere, nobody knows (to where).' (K 164)

    e. *J'e-digi-ke*   *käsa* *dieli-e-ni.*
      what-ABL-IND   eagle fly-PAST-3SG
      'An eagle came flying from somewhere.'

As in the case of the Interrogative pronouns (9.5.1), when an Indefinite pronoun functions as a modifier the head nominal takes a 3rd person possessive affix.

(634) a. *J'eu-ke*   *ni:-ni*   *eme:-ni.*
         what-IND   man-3SG   come.PAST-3SG
         'A certain person came.'

     b. *'Ana-zi*   *ni-ke*   *aziga-ni*   *eme:-ni.*
         boat-INST who-IND   girl-3SG   come.PAST-3SG
         'A certain girl came by boat.'

Example (635) illustrates the use of an indefinite pro-adverb.

(635) *Od'o*   *i:mi-ke*   *gakti-e-ni.*
      old.man why-IND   freeze-PAST-3SG
      'The old man got frozen for some reason.'

9.6.2. Non-specific Indefinite pronouns

Non-specific Indefinite pronouns are used when the speaker not only cannot identify the referent, but may not even be sure whether such a referent exists. Thus, they have a non-referential reading and can also refer to a potential class of objects, that is, they may have a generic interpretation. Such pronouns usually correspond to the English pronouns of the *some-* or *-ever* series, and Russian non-specific pronouns of the *-nibud'* or *by ni* series. They are not attested with a modifier function.

9.6.2.1. Derivation

Non-specific Indefinite pronouns are derived from interrogative pro-nouns and pro-adverbs by means of the clitic *-dA*, e.g., *ni-de* 'somebody', *j'e-le-de* 'somewhere', *ni-digi-de* 'from somebody', *ni-we-de* 'somebody (ACC)'. This particle always follows the case inflection in the word. On *-dA* as an additive focus particle see 12.1.1.3.

9.6.2.2. Functions

9.6.2.2.1. Indefinite function

Since non-specific Indefinite pronouns, unlike specific Indefinite pronouns, do not presuppose the existence of the corresponding referent, they are preferably used in sentences marked for the future or irrealis modality (including the evidential). Alternatively, specific Indefinite pronouns are most often used in sentences where the verb takes the Present or Past Indicative form. Compare (636a) and (636b) in this respect.

(636) a. *Ni-de*   *eme-zeɲe-ni.*
          who-IND   come-FUT-3SG
          'Somebody will come.'
      b. *Ni-ke*   *eme:-ni.*
          who-IND   come.PAST-3SG
          'Somebody came.'

More examples for the non-specific Indefinite pronouns follow.

(637) a. *J'eu-de*   *gada-la-mi*   *nixe-ini.*
          what-IND   buy-PURP-SS   do-3SG
          'He is going to buy something.'
      b. *I:-le-de*   *nede:-ni*   *bize.*
          what-LOC-IND   put.PAST-3SG   must
          'He must have put it somewhere.'
      c. *J'e-zi-de*   *xuai-zeɲe-i.*
          what-INST-IND   cut-FUT-1SG
          'I will cut (it) with something.'

Examples (638) demonstrates the generic reading of the non-specific Indefinite pronoun. In (638b) a universal meaning is rendered through the indefinite pro-verb *ja-* (9.3.4) combined with the clitic *-dA*.

(638) a. *J'e-we-de*   *zawa-ini*   *neɲu-mi*
          what-ACC-IND   take-3SG   younger.sibling-REF
          e-lege-ni   *tagda-gi.*
          NEG-PURP-3SG   recognize-REP
          'She takes everything, so that her brother does not recognize her.'
          (K 167)
      b. *Ono*   *ja:-ni-de*   *eme-gi-zeɲe-ni.*
          how   PROV-3SG-IND   come-REP-FUT-3SG
          'He will return, whatever happens.'

The generic interpretation of the non-specific Indefinite pronouns also arises within a generalized relative clause, a non-finite one (19.5), or a finite one (18.3.2.1). For example, in the embedded clause *j'e-digi-de emegisi:* 'wherever I came from' the Indefinite pronoun *j'e-digi-de* in the Ablative denotes the whole class of objects to which the corresponding predication may be applied. Further examples of this use can be found in the corresponding sections.

9.6.2.2.2. Interrogative function

Non-specific Indefinite pronouns are used as Interrogative pronouns within embedded non-finite questions (see 23.1.4.2).

9.6.2.2.3. Negative function

Negative pronouns and adverbs are morphologically identical to the non-specific Interrogative pronouns and adverbs formed with the particle *-dA*, for example: *ile-de* 'nowhere', *ali-de* (or *ali-ali-de*) 'never', *ni:-de* 'nobody', *ni:-zi-de* 'with nobody', *j'e-uxi-de* 'to nowhere' (LAT), *j'e-we-de* 'nothing' (ACC). In other words, the polarity of the indefinite non-specific pronouns depends on the general polarity of the sentence in which they occur. On the use of the negative pronouns and adverbs, see 23.2.

Note also the negative adverb: *emne-de* 'not even once' (from *emne* 'once'). The numeral *omo* 'one' followed by the particle *-do* means 'not a single' under the scope of negation.

(639) *O-du*   *omo-do*   *g'aja*   *anči.*
       this-DAT   one-FOC   duck   no
       'There is not a single duck here.'

9.6.3. Universal (free-choice) pronouns

The universal pronouns correspond to the English pronouns of the *any-* or *every-* series. They can express the possibility of choice ('any of') or they may have a generic meaning ('all', 'every').

9.6.3.1. Derivation

The standard way of forming universal Indefinite pronouns is by adding the particle *dexem(i)* (its reduced form is *dem*) to the interrogative pro-nouns and pro-adverbs. Examples are: *ni dexemi* 'any, every, everybody', *j'e-we dexemi* 'any, every, everything', *ali dexemi* 'at any time', *i:le dexemi* 'everywhere', *j'e-uxi dexemi* 'to everywhere', etc. The particle *dexem(i)* is not a clitic: it bears a separate phonological stress and does not follow the vowel harmony of the preceding word.

The universal expression *ono bi: dexemi* 'any, of any kind' contains the interrogative adverb *ono* 'how', the Present active participle of the copula verb *bi:*, and the universal particle *dexemi*. This expression structurally corresponds to a relative clause and functions as a modifier, as shown in (640).

(640) a. *Bi ono*   *bi:*   *dexemi bui-we*   *aju-mi.*
       me how   be.PRP IND   animal-ACC   like-1SG
       'I like all animals.'
   b. *Eineŋi*   *ono*   *bi:*   *dexemi ni:*   *eme:-ti.*
       today   how   be.PRP IND   man   come.PAST-3PL
       'Today all sorts of people came.'

9.6.3.2. Function

For obvious semantic reasons, the sentences with universal pronouns in argument positions often involve the Habitual verbal forms, as in (641).

(641) a. *I:-le*   *dexemi ima:-na.*
       what-LOC   IND   snow-V
       'There is snow everywhere.'
   b. *J'e-zi*   *dexem(i)*   *ŋele-ini.*
       what-INST IND   be.afraid-3SG
       'He is afraid of everything.'
   c. *Ni:*   *bejeku- ni*   *i:-le*   *dem*
       man   similar-3SG   what-LOC   IND
       bie.
       be.PRES.HAB
       'There are people similar to other people everywhere.' (K 167)
   d. *J'eu*   *dem*   *j'e-ni*   *bie*   *gune.*
       what   IND   what-3SG   be.PRES.HAB   EV
       'Apparently, there are all sorts of things.' (K 191)

In the subject position an indefinite universal pronoun normally triggers Plural agreement on the finite verb.

(642) *Ni*   *dexemi*   *teu*   *sa:-du.*
       who   IND   all   know-PL
       'Everybody knows.'

9.6.4. Other types of Indefinite pronouns

Some morphologically rare types of both specific and non-specific Indefinite pronouns are also based on the Interrogative pronouns, but include affixes other than those described in sections 9.6.1–9.6.3. Such pronouns can be illustrated only by occasional examples, and it is therefore difficult to draw a definite conclusion about their distribution and meaning. Here we will simply cite the relevant examples without commenting on them at length.

9.6.4.1. Indefinite pronouns formed with compound particles

The indefinite (both specific and non-specific) meaning can be expressed by the pronouns derived with the complex particles *deke* or *kede*. These particles apparently appeared as a combination of the two indefinite clitics *-dA* and *-kA*, but they do not behave as clitics themselves.

(643) a. *J'e-digi*   *deke*   *eme:-ni*   *bize.*
           what-ABL   IND   come.PAST-3SG   must
           'He must have come from somewhere.'

       b. *J'e-uxi*   *deke*   *ŋene-ʒe-mi.*
           what-LAT   IND   go-SUBJ-1SG
           'I will go somewhere.'

       c. *Ni*   *deke*   *ʒawa:-ti*   *bize.*
           who   IND   take.PAST-3PL   must
           'Somebody must have taken it.'

       d. *Ari (< ali)*   *deke*   *mu:-ʒe-fi.*
           when   IND   shamanize-1PL.IN
           'One day we will shamanize.' (K 125)

(644) *Kanda*   *mafa*   *bie i:-le*   *kede.*
       Kanda   old.man   be.PRES.HAB   what-LOC IND
       'The old man Kanda lives somewhere.'

In a similar way, the specific and non-specific Indefinite pronouns are sometimes formed with the complex particle *dele*, which originates from the contraction of the indefinite clitic particle *-dA* and the contrastive clitic particle *-lA* (12.1.1.7).

(645) a. *I:-le*   *dele*   *kärkärkär*   *wo:-ni.*
           this-LOC   IND   INTER   do.PAST-3SG
           'Shaving (of wood) is happening somewhere.' (K 110)

       b. *J'eu*   *dele*   *etete-ini*   *gune.*
           what   IND   work-3SG   EV
           'It looks like somebody (something) is working.' (K 110)

       c. *I:-le*   *dele*   *eke:-ni.*
           what-LOC   IND   get.stuck.PAST-3SG
           'He got stuck somewhere.'

       d. *j'eu*   *dele*   *amba*
           what   IND   evil.spirit
           'some evil spirit' (SKX 272)

9.6.4.2. Indefinite pronouns formed with the particle *-gu*

The non-specific indefinite meaning seems to be rendered by pronouns derived with the suffix (or the cliticized particle) *-gu* from the interrogative stem *j'e-*. Such pronouns are normally repeated twice.

(646) a. *Ono-gu*   *ono-gu*   *nixe-te-mi-ze.*
             how-IND   how-IND   do-PERM-1SG-HORT
             'Let me do it somehow.'

        b. *J'e-we-gu*   *j'e-we-gu*
             what-ACC-IND   what-ACC-IND
             gada-ta-mi-ze.
             buy-PERM-1SG-HORT
             'Let me buy something.'

        c. *J'eu-gu*   *j'eu-gu*   *diga-mi*   *teu*
             what-IND   what-IND   eat-INF   all
             bi-si-ni.
             be-PAST-3SG
             'He was living all the time, eating something.' (K 134)

9.6.4.3. Indefinite pro-verb

The meaning of the indefinite pro-verb *ja-* is very general, and mainly depends on its morphological form. In (647a) the pro-verb is in the Subjunctive form meaning literally 'let it do something'. In (647b) the Infinitive can be translated approximately as 'doing something'.

(647) a. *Ja-za*   *mo:gosi-mi.*
             PROV-SUBJ   shamanize-INF
             'OK, let us shamanize.' (K 155)

        b. *Xuli-mi-de*   *ja:-mi-de*   *j'eu*
             walk-INF-FOC   PROV-INF-FOC   what
             ni: *gagpa-si:-ni?*
             man s   hot-IM-PAST-3SG
             'Walking or doing something, which man is shooting (with a bow)?' (K 111)

When co-occurring with the indefinite object pronoun *j'e-we* the indefinite pro-verb means 'do' (648), while when used without the object pronoun under the scope of negation it can mean 'do nothing' (649).

(648) a. *J'e-we-de*   *e-si-mi*   *ja:.*
        what-ACC-IND   NEG-PAST-1SG   PROV
        'I was not doing anything.'

     b. *Eineŋi*   *ono-do*   *ja:*   *b'ono-zo-mi.*
        today   how-IND   PROV   catch-SUBJ-1SG
        'I will catch (you) today whatever happens.' (K 155)

(649) *Belie* *tene*   *ei-de*   *olokto* *ei-de*   *ja:.*
       fairy CONT   NEG-FOC   cook   NEG-FOC   PROV
       'And the fairy does not cook, does not do anything.'

On the usage of the indefinite pro-adverb in alternative questions see 23.1.4.

9.6.4.4. The indefinite substitution word *aŋi*

The element *aŋi* is a pronominal stem used when a speaker is looking for an appropriate word and cannot recollect it. The stem *aŋi* is inflected in exactly the same way as the corresponding constituent in the clause should be inflected. The word that actually has to be in the sentence is normally used within the same sentence immediately following the word *aŋi* and bears the same inflectional form. In (650a) the word *aŋi* is in the Nominative and replaces the subject (*belie*); in (650b) and (650c) it is in the Accusative because it replaces the direct object (*zakta-wa* and *xulepte-we*, respectively), in (650d) it replaces a verb in the Subjunctive, while in (650e) it replaces a nominal modifier (note the Plural marker *-ziga* which encodes the semantic plurality of the replaced noun *Suaŋka* 'the Suankas'). The element *aŋi* is glossed as IND (indefinite).

(650) a. *Uti*   *a:nta* *aŋi*   *belie* *tene*   *zugdi*
        that   woman IND   fairy CONT   house
        saŋña-muga-wa-ni   *zawa:-ni.*
        smoke-N-ACC-3SG   take.PAST-3SG
        'This woman, what's she called, the fairy, held onto the flue.'

     b. *Ge*   *olokto:-ni*   *belie* *aŋi-we*
        well   cook.PAST-3SG   fairy IND-ACC
        zakta-wa.
        porridge-ACC
        'Well, the fairy cooked this, what's it called, porridge.'

     c. *Konz'o-tigi*   *aŋi-we*   *xulepte-we*
        box-LAT   IND-ACC   ash-ACC
        koŋgodo:-ti.
        pour.PAST-3PL
        'They poured this, ash, into the box.'

d. *Ñaŋga-da*   *sin-e-we*   *aŋi-nde-ze-mi*
little-FOC   you-0-ACC   IND-SEM-SUBJ-1SG
kese-li-nde-ze-mi.
torture-INC-SEM-SUBJ-1SG
'I will – what's the word – torture you a little.'

e. *Uti*   *aŋi-ziga*   *zugdi, Suaŋka*   *zugdi.*
that   IND-PL   house Suanka   house
'This is the house of those, the Suankas.'

In a number of cases the same element *aŋi* in a corresponding case form functions as an Indefinite pronoun.

(651) a. *Aŋi-le*   *ŋene:-mi.*
IND-LOC   go.PAST-1SG
'I was walking somewhere.'

b. *Aŋi-le*   *b'a-mi*   *bi.*
IND-LOC   find.PAST-1SG   me
'I found it somewhere.' (K 111)

9.7. Other determiners

Pronominal determiners are always used in preposition to the head noun.

9.7.1. *Xoŋto* 'another'

The determiner *xoŋto* 'another, other' indicates a choice between several objects, cf.:

(652) a. *Bi* *ei*   *in'ei-we*   *xoŋto* *in'ei-digi*   *aja*
me this dog-ACC   other dog-ABL   good
aju-mi.
like-1SG
'I like this dog more than other dogs.'

b. *Xoŋto*   *ba:-tigi*   *wele-mi*
other   place-LAT   cross-INF
kämbu-was-u-ji.
sacrifice-DIV-PAS-PRP
'Going to the other place (mountain), one makes a sacrifice.'
(K 123)

9.7.2. *Gagda* 'another, the other'

The determiner *gagda* 'another, the other' means 'one of the pair', 'opposite', and expresses the idea of choosing between the two possible candidates. They may be paired objects, for example, body parts, and in this case the word *gagda* expresses singularity, often in combination with the numeral *omo* 'one' (4.2.1.1).

(653) a. *Gagda*   *aziga*   *soŋo*   *gagda*   *aziga*   *jexe*
           other   girl   cry   other   girl   sing
           wo:-ni.
           do.PAST-3SG
           'One girl was crying, the other girl was singing.' (K 132.)

      b. *Omo*   *gagda*   *ŋala-zi*   *olokto-i,*   *omo*
          one   another   hand-INST   cook-PRP   one
          gagda   *ŋala-zi*   *oño*   *wo:-i.*
          another   hand-INST   ornament   make-PRP
          'With one hand she is cooking, with the other hand she is making ornaments.' (K 165)

      c. *Ña*   *gagda*   *bä:-tigi*   *xetigene:-ni.*
          again   opposite   bed-LAT   jump.PAST-3SG
          'She again jumped to the opposite bed.' (K 182)

      d. *Omo*   *gagda*   *uŋta*   *lo:-ni.*
          one   half   boot   hang.PAST-3SG
          'One boot was hung up.' (K 143)

Gagda may be used independently. Since it always presupposes a definite set of possible candidates, in this case it has the substantivized possessive form *gagda-ni* 'the other (of the two)'. The possessive 3rd person suffix *-ni* here expresses definiteness, as is typical of definite nominal expressions (4.1.3.3), cf.:

(654) a. *Ña*   *uti*   *omo-lo*   *zube*   *o-gi-e-ni,*
          also   that   one-CONT   two   be-REP-PAST-3SG
          ti: *omo*   *gagda-ni*   *soŋo-li-ge*   *gune.*
          that   one   another-3SG   cry-INC-PERF   EV
          'One of these two remained, one of them started crying as well.' (K 188)

      b. *Ei*   *mo:*   *gugda-da,*   *gagda-ni*
          this   tree   tall-FOC   another-3SG
          nektese-i-de.
          short-FOC-FOC
          'This tree is tall and the other one is short.'

c.   *Min-du*   *zube*   *ugda*   *bie*   *omo*
     me-DAT   two   boat   be.PRES.HAB   one
     dampi,   *gagda-ni*   *imexi.*
     old   another-3SG   new
     'I have two boats, one is old, the other is new.'

9.7.3. *Gele~gere* 'each, all'

The determiner *gele~gere* 'each' is available but very infrequent, cf.:

(655) a.   *Nua-ti*   *gere*   *ni:*   *mefei*   *sene*   *aju-iti.*
           he-3PL   each   man   REF.ACC.PL   only   like-3PL
           'Each of them likes only himself.'

      b.   *gele golo*   'all the countries'
           gele xoto   'all the cities'
           gele ni: 'all the people' (SK 262)

9.7.4. Pronominal determiners in temporal expressions

The pronominal determiners *gä:ŋa* 'every' and *omo* (... *tei*) 'whole' are compatible only with partly adverbialized temporal nouns in the Nominative or the Accusative, cf.:

(656) a.   *Bi*   *ma:ma-i*   *gä:ŋa*   *neŋi-ni*   *zugdi-du*
           me   grandmother-1SG   every   day-3SG   home-DAT
           bie.
           be.PRES.HAB
           'My grandmother is at home the whole day.'

      b.   *Bi*   *ta:mati*   *omo*   *aŋa-ni*   *uni-e-mi.*
           me   last.year   one   year-3SG   be.ill-PAST-3SG
           'Last year I was ill the whole year.'

      c.   *omo dogbo*   'the whole night'
           gä:ŋa aŋa-ni   'every year'
           omo zua   'the whole summer'
           omo ñuŋu-me neŋi-ni tei   'six whole days'
           <one six-ACC day-3SG FOC>

Chapter 10
Adverbs and postpositions

10.1. Adverbs

Adverbs function as verbal modifiers or clausal adjuncts; degree adverbs modify adjectives, nouns and other adverbs. Udihe seems to lack a class of sentence adverbs, with the exception of certain evidential (12.1.2.1) and epistemic (12.1.2.2) elements. Certain adverbs function as predicates in copular constructions (17.2.2.2) and some take sentential arguments (Chapter 20). Adverbs are always optional in the sentence, with the exception of copular constructions, in which they have a predicative function, and in constructions in which they are used in reply to adverbial *wh*-questions.

Most adverbs are morphologically unchangeable, although some have a transparent morphological structure and go back to nominal inflectional categories (case forms). Case-inflected form a deficient paradigm, but each member of the paradigm can be viewed as a separate lexical entry. Adverbs derived or converted from nouns may preserve certain nominal properties, such as being combinable with certain postpositions. In other syntactic properties they contrast with nouns: adverbs cannot be modified by an adjective or a possessive modifier, but only by other adverbs. A number of manner adverbs formally coincide with qualitative adjectives, or are derived from them. Some spatial adverbs have much in common with spatial postpositions, and are often based on the same stem (10.2). However, unlike postpositions, adverbs do not take nominal arguments that may be cross-referenced by personal inflections.

This section is based on a semantic classification of adverbs: spatial adverbs (10.1.1), temporal adverbs (10.1.2), manner adverbs (10.1.3), and degree adverbs (10.1.4). The semantic classification is highly conventional because a number of adverbs are polysemantic and render two or more meanings, e.g. *tuge* 'quickly' and 'soon' (a manner and temporal adverb); *go:* 'far away' and 'a long time' (a spatial, temporal, or manner adverb). The adverbial derivation is addressed within each particular section. Section 10.1.5 concentrates on "frozen" adverbial collocations; section 10.1.6 describes adverbial reduplications. The general properties of the adverbial phrase are discussed in 10.1.7.

On adverbs based on pronominal stems (pro-adverbs), see Chapter 9. Adverbial functions performed by nouns in different oblique cases are described under 15.1.4.

10.1.1. Spatial adverbs

Spatial adverbs with locative, lative, ablative, and prolative semantics are derived from local cases of spatial nouns. Adverbs that denote the same localization and form various series of related words based on the same stem will be referred to as serial adverbs (10.1.1.1). There are no spatial adverbs that go back to the Nominative, Destinative, and Partitive case forms, and some other individual "lacunas" are possible. Furthermore, adverbial case inflections deviate slightly from nominal inflections (4.1.3).

(657)	nouns	adverbs
ACC	*-wA, -mA*	*-wA, (')-fA*
DAT	*-du*	*-du, -nu*
LOC	*-lA, -dule*	*-lA*
ABL	*-digi*	*-digi, -nigi*
LAT	*-tigi*	*-tigi, -uxi/-ixi, -zAŋAzi, -ligde/-lAgdA*
PROL	*-li, -dili*	*-li*
INST	*-zi*	*-zi*

The adverbial Ablative in *-zA-ŋAzi* seems to be derived from spatial nouns in *-zA* (5.1.2.3) with some kind of adverbial Ablative suffix. The Accusative adverbial marker (')-*fA* does not coincide with the nominal Accusative inflection, cf. *w'e-fe* 'above' and *we:-we-ni* 'top, surface, upper part (ACC).' However, it is available for some adverbialized nouns, cf.: *w'eh-fe b'äs'a-fa* 'along mountains and rivers' (SKX 296). The adverbial Accusative forms in '*-fA* can function as postpositions without personal markers (see 10.2.2). The Ablative in *-ligde/-lAgdA* is attested only for a few adverbs. We do not have enough information to deduce how its meaning differs from that of the regular Ablative. As a rule the adverbial case suffixes tend to be replaced with standard nominal ones.

Non-serial spatial adverbs (10.1.1.2) are typically based on one 'frozen' case form, and do not make paradigms.

10.1.1.1. Serial adverbs

Serial spatial adverbs are derivationally related to spatial adjectives in *-uxe* (6.4.1.3.2) and spatial nouns in *-zA* (5.1.2.3). The latter demonstrate some adverbial features.

Case forms of adverbs have basically the same meaning as the corresponding case forms of nouns (4.2.2), with the following adjustments. The Accusative denotes a very general location in space, for example, *c'a-fa* 'in the space behind', *uig'e-fe* 'in the space above', etc. The Instrumental is basically synonymous with the Prolative: both correspond to the meaning 'along the

place, through the place'. The Ablative in *-zA-ŋAzi* seems to express a more general destination ('from the space below') than the more finely specialized Ablative in *-digi/-nigi* ('from below'); however, their distribution is not clear.

10.1.1.1.1. General orientation

The table below presents the series of the most important spatial adverbs of general orientation; lacunas in the paradigms are shown with hyphens.

Table 8. Spatial adverbs of general orientation

	xegi-, xegie- 'below, down'	*da:s'a(-),* *da:-* 'near'	*amä:-* 'behind, after'	*zuli-, zulie-* 'before'	*ba:-* 'outside'
ACC	*xegie-fe*	-	*am'ä-fa*	*zulie-fe*	*b'a-fa*
DAT	*xegi-nu*	*da:s'a-nu*	*amä:-du*	*zulie-du*	*ba:-nu*
LAT	*xegi-xi*	*da:s'a-tigi*	*amä:-ixi*	*zulie-ixi*	*ba-ixi*
LOC	*xegi-le*	*da:s'a-la,* *da:-la*	*amä:-la*	*zulie-le*	*ba:-la*
PROL	*xegie-li*	*da:s'a-li*	*amä:-li*	*zulie-li*	*ba:-li*
INST	*xegie-zi*	*da:s'a-zi*	*amä:-zi*	*zulie-zi*	-
ABL	*xegie-nigi,* *xegie-zeŋezi*	*da:s'a-nigi*	*amä:-digi,* *amä:-zaŋazi*	*zuli-digi,* *zulie-zeŋezi*	*ba:-digi,* *ba:-zaŋazi*

	go:(-) 'far'	*cai-* 'far away'	*do-* 'inside'	*ño:-* 'before'	*ui(ge)-,* *uie-* 'up'	*kä:-* 'close'	*ca:-* 'behind'
ACC	-	-	*d'o-fo*	*ño:-fo*	*uig'e-fe*	*k'ä-fa*	*c'a-fa*
DAT	-	*cai-nu*	*do:-nu*	*ño:(n)-du* *ño:(n)-do*	*ui-nu*	-	-
LAT	*go:-tigi*	*cai-xi*	*dü-ixi*	*ño:-xi*	*ui-xi*	-	*ca:-tigi*
LOC	*go:-lo*	*cai-le*	*do-lo*	-	*ui-le*	*kä:-la*	-
PROL	*go:-li*	*cai-li*	*do:-li*	*ño:n-dili*	*ui-li*	-	-
INST	*go:-zi*	-	*do:-zi*	*ño-zi*	*uie-zi*	-	-
ABL	*go:-nigi*	*cai-nigi*	*do:-nigi,* *do-zoŋozi*	-	*ui-nigi*	-	*ca:-digi,* *ca:-ŋazi*

As illustrated in the table, roots differ slightly from case to case, and the paradigms are incomplete. The adverbs *go:* 'far' and *da:s'a* 'near' can be used in an uninflected (Nominative) form. The following examples demonstrate the use of spatial serial adverbs.

(658) a. *ŋene-ze-fi*   *amä-ixi.*
      go-SUBJ-1PL.IN   back-LAT
      'Let us turn back.'

b. *D'o-fo*   *nagda:-ni*   *aŋma-ni.*
inside-ACC get.PAST-3SG   mouth-3SG
'(The fish) got into the mouth.'

c. *Cai-le*   *we:*   *ise-pte.*
far-LOC   hill   see-DEC
'Far away a hill can be seen.'

d. *Susa-gi-li,*   *amä:-zaŋazi*   *buono-li-li*
escape-REP-3SG   back-ABL   take.over-INC-3SG
tokö.
cloud
'He went back, the cloud began to overtake him from behind.'

e. *Da:-la*   *aŋa-ŋi-ze-i.*
near-LOC   night.shelter-V-SUBJ-IMP.2SG
'Stay nearby overnight.' (K 113)

Some spatial adverbs also have a temporal meaning (10.1.2.4.).

10.1.1.1.2. Orientation relative to the river or the fireplace

Since the life of the Udihe people is closely associated with rivers, orientation relative to the river is the most detailed semantic field of adverbs. Generally speaking, adverbial series specialize in expressing three different localizations: relative to the direction of the stream, relative to the riverbank, and relative to the side of the river. As is typical of some other Siberian languages (for example, Selkup and Ostyak), the same system of spatial adverbs is also used to render orientation relative to the fireplace, as placed in a traditional dwelling. The parallelism of the "inner" world (the home with its center, the fireplace) and the "outer" world with its center, a river, is represented in Table 9.

Table 9. Orientation to the river and the fireplace

orientation to the river	orientation to the fireplace	adverbial stem
'riverbank, space on land near the water'	'place near the fire'	*ŋä:-*
'the opposite side of the river'	'the opposite side of the dwelling'	*bagä:(za)-*
'space far from the river'	'place far from the fire, at the pitch slope of the roof'	*die-, di:-*

In addition, two adverbial stems indicate orientation in relation to the flow of the river: *soli-/solö-* 'upstream' and *ezi(ze)-/ezie-* 'downstream'.

The paradigms are given in the table below. Not all the forms theoretically possible are actually available.

Table 10. Adverbs of orientation to the river and the fireplace

	'upstream'	'downstream'	'river bank, fireplace'	'far from the river or the fire'	'across the river, the dwelling'
ACC	*solie-fe*	*ezie-fe*	*ŋ'ä-fa*	*di(g'e)-fe*	*bag'ä-fa*
DAT	*soli-nu*	*ezi-nu*	*ŋä:-nu*	*di:-nu*	*bagä:-nu*
LAT	*soloi-xi*	*eiei-xi*	*ŋä-ixi*	*di:-xi*	*bagä-ixi*
LOC	*soli-le*	*ezi-le*	*ŋä:-la*	*di:-le*	*bagä:(za)-la*
PROL	-	-	*ŋä:-li*	*di:-li, die-li*	*bagä:-li*
INST	*solö-zi*	-	*ŋä:-zi*	-	*bagä:-zi*
ABL	*solö-nigi,*	*ezize-digi,*	*ŋä:-nigi,*	*di:-nigi,*	*bagä:-nigi,*
	solö-digi,	*ezi-ze-ŋezi*	*ŋä:-digi*	*di:-ligde*	*bagä:-lagda,*
	solö-ze-ŋezi				*bagä-za-ŋazi*

The adverbs of the series *bagä:(za)-* also have the more general meaning 'opposite side'.

(659) *Z'oto* *bagä:-za-la* *te:-i.*
    otter opposite-N-LOC sit-PRP
    'The otter is sitting opposite.'

10.1.1.1.3. Adverbial expressions with the stem *ba:(za)-* 'outside'

Compound adverbial expressions based on the noun *ba:* *(bua)* 'place, taiga, space, sky, outside place' or its nominal derivative *ba:-za* indicate orientation in the forest/taiga (remarkably, Udihe lacks a specialized noun with the meaning 'taiga'). Such expressions include the postpositional element *xo:-ni* 'top' or *ge:-ni* 'surface', inflected for the 3rd person Singular Possessive. The latter loses vowel length and independent stress, and is pronounced as a single phonological word with the element *ba:-za*. In the Accusative personal inflections are absent, as is otherwise typical of the Accusative postpositions (10.2.2). Prolative and Instrumental forms have not been attested.

Table 11. Adverbial expressions of orientation in the taiga

NOM	*ba:-za ge-ni* 'forest, taiga'	*ba: xo:-ni* 'forest, taiga'
ACC	*ba:-za g'e-fe*	*ba: x'o-fo*
DAT	*ba:-za ge-di-ni*	*ba: xo:n-dile-ni*
LAT	*ba:-za ge-ti(gi)-ni*	*ba: xo:n-ti(gi)-ni*
LOC	*ba:-za ge-le-ni*	*ba: xo:-le-ni*
PROL	-	-
INST	-	-
ABL	*ba:-za ge-digi-ni*	*ba: xo:n-digi-ni*

The two adverbial series in question seem to be synonymous when they concern orientation in the taiga, but the first series (*ba:-za ge-ni*) has in addition the more general meaning 'outside', cf. (660a).

(660) a. | *Ba:-za* | *ge-tigi* | *omo* | *uge* | *tei* |
place-N	surface-LAT	one	bunch	whole
zauŋa	*gazi-e-ni.*			
greenling	bring-PAST-3SG			

'She brought a whole bunch of greenlings outside.'

b. | *Ba:-za* | *ge-di-ni* | | *eikpesi-mu* | *xoton-digi* |
place	surface-LOC-3SG		breathe-IMI	town-ABL
aja.				
well				

'It is better to breathe in the taiga than in the town.'

c. | *Ba:* | *xo:n-ti(gi)-ni* | *xulie-mi.* |
| place | top-LAT-3SG | walk.PAST-1SG |

'I went to the taiga.'

d. | *Olondo-mo-zoŋo-fi* | *ba:-za* | *ge-le-ni.* |
| ginseng-V-FUT-1PL IN | place-N | surface-LOC-3SG |

'We shall go to seek ginseng in the forest.'

10.1.1.2. Non-serial spatial adverbs

In this section we shall confine ourselves only to some examples interesting from the derivational point of view.

(i) *do-lo do-lo* 'in the very middle' is the result of the repetition of the Locative form of the stem *do:-* 'inside' with a somewhat intensified meaning, cf.:

(661) | *Do-lo* | *do-lo* | *nede.* |
| inside-LOC | inside-LOC | put |

'Put in the very middle, deeply inside'.

(ii) The following two words are in transition from the class of nouns to the class of adverbs:

(662) | *zukti(gi)* | 'home' | < *zugdi-tigi* | 'to the house' <house-LAT> |
| *zugdu* | 'at home' | < *zugdi-du* | 'in the house' <house-DAT> |

For the first word various phonetic forms (*zuktiyi, zuktigi, zugditigi, zugdi:,* and *zukti:*) are used interchangeably.

(663) a. *Uta-digi   ŋene:-ni   jegdige   zugdi-tigi.*
       that-ABL   go.PAST-3SG hero   house-LAT
       'Then the hero went home.'

     b. *Zugdi: ŋen'e.*
       house.LAT   go.PERF
       'He went home.'

(iii) The nominal stem *uke* 'doorway' takes the adverbial Dative suffix *-nu*, cf. *uke-nu* 'in the doorway' (adverb) and *uke-du* 'by the door' (noun).

10.1.2. Temporal adverbs

Adverbs of change and continuation as such are missing. The corresponding semantics ('already', 'still', etc.) are commonly rendered by focus particles that may have adverbial force (Chapter 12), and by the universal quantifier *teu* in the adverbial function (11.2.2.1.3). The meaning 'already' may be implied by the Perfect verb (7.8.1.3.1).

10.1.2.1. Calendrical adverbs

Examples of calendrical adverbs of different semantics, such cyclic adverbs (664a) and deictic adverbs (664b), are given below.

(664) a. *tue*   'in the winter'
       timadule ← tima-dule   'in the morning'
       <morning-LOC>
       sikie   'in the evening'
       sikiene (SKX 90)   'early in the evening'

     b. *ta:mati*   'last year'
       te:meti (Schneider 1936: 71)   'many years ago'
       eineŋi ← ei neŋini   'today'
       <this day>
       timana(ŋi) ← tima neŋini   'tomorrow, the next day'
       <morning day>
       tineŋi ← ti: neniŋi   'yesterday'
       <that day>
       ti:ñozi ← tineŋi ño:zi   'the day before yesterday'

Adverbs of season and most adverbs of time of day are morphologically the Nominative form of the temporal nouns. The Nominative form of these adverbs has the continuative meaning. The starting and the final point in time, its periodicity, and other more subtle nuances of temporal characteristics are

expressed by combinations with the temporal postpositions (10.2), and with the Ablative and Lative cases (15.4.2) in their temporal meanings.

(665) *timana(ŋi) ca:-la-ni*   'the day after tomorrow'
      <tomorrow after-LOC-3SG>
      aŋa teun-di-ni   'every year'
      <year all-DAT-3SG>
      neŋini teun-di-ni   'every day'
      <day all-DAT-3SG>
      timana dexi   'till tomorrow'
      <tomorrow till>

The corresponding temporal nouns are mostly used deictically and have a definite interpretation (4.1.3.3.2).

10.1.2.2. General time adverbs

General time adverbs may be deictic, or express indefinite time. Some of them are listed below.

(666) *anana*   ← *ana-ana* (cf. *ana-pti* 'former')   'long ago'
      bis'esi   ← *bi-s'e-si* <be-PERF-PC>   'then, later'
      imexizi   ← *imexi-zi* <new-INST>   'recently'
      tugezi   ← *tuge* <quick-INST>   'soon'
      w'ataŋi   ← *w'atanaŋi* (cf. *w'ata-pti* 'recent') 'just, recently (today)'
      xa:ndini ← *xa:n-di-ni* <some-DAT-3SG>   'sometimes'
      bimi   ← *bi-mi* <be-INF>   'later, after a while'

Examples:

(667) a. *Meŋdele*   *jexe-ini.*
         often   sing-3SG
         'He often sings.'
      b. *Baita*   *kimpi-gi-e:-ni.*
         temporarily   close-REP-PAST-3SG
         'It is temporarily closed.'
      c. *Ele*   *čaja*   *xuili-li-e-ni.*
         soon   tea   boil-INC-PAST-3SG
         'The tea is about to boil.'
      d. *Anana*   *bi*   *in'ei-we*   *zawa-si-ge-i.*
         long.ago   me   dog-ACC   take-IM-PERF-1SG
         'Long ago I took a dog.'

A number of time adverbs are derived through metaphorical transition from spatial adverbs based on the stems *ño:-*, *amä:-*, *da:s'a*, *go:*, *cai-*.

(668) *da:s'a-zi*   'for a short time, briefly, shortly'
      <near-INST>

      go:(-zi)   'long time'
      <far-INST>

      cai-xi   'from this time onwards'
      <far-LAT>

      amä:-li   'after, later'
      <back-PROL>

      amä-la-ni   'after, later, then'
      <back-LOC-3SG>

      ñ'o-fo   'then'
      <before-ACC>

      ño:(n)-du, ño:(n)-do   'first'
      <before-DAT>

      ño-li, ñon-dili, ñoxo-li   'first'
      <before-PROL>

Cf. the spatial (669a) and temporal use (669b) of the same adverb:

(669) a.   *Lučegor-tigi*   *ŋene-mi*   *ketu*   *go:*.
         Luchegorsk-LAT   go-INF   very   long
         'It takes a long time to travel to Luchegorsk.'

      b.   *Go:-tigi*   *e-zi*   *ŋene*.
         long-LAT   NEG-IMP.2SG go
         'Do not go far away.'

10.1.3. Manner adverbs

Manner adverbs are a morphologically and semantically heterogeneous class of verbal modifiers. They render various manner semantics and can possess additional meanings (temporal, causal, degree, limitational, etc.). Morphologically simple manner adverbs are presented in Chapter 26. We shall concentrate here on morphologically derived adverbs (10.1.3.1) and ideophones (10.1.3.2).

10.1.3.1. Derived adverbs

Deadjectival derivation with the suffix *-zi* (10.1.3.1.1) through conversion of the bare adjective (10.1.3.1.2) is very productive; other derivational means

addressed under 10.1.3.1.3–10.1.3.1.7 lack productivity. Affixes specialized in adverbial derivation are glossed as ADV.

10.1.3.1.1. Adjectival adverbs in -*zi*

Adjectival qualificative adverbs are derived through lexicalization of the Instrumental case of adjectives in -*zi*. This pattern can be used with practically any qualitative adjective (670a), adjectival quantifiers, and pronominal determiners (670b), for example:

(670) a. | *aja* | 'good' | *aja(n)-zi* | 'well' |
| --- | --- | --- | --- |
| *maŋga* | 'strong' | *maŋga-zi* | 'strongly' |
| *gugda* | 'high' | *gugda-zi* | 'high up' |
| *paki* | 'skillful' | *paki-zi* | 'skillfully' |
| *zo:ŋku* | 'poor' | *zo:ŋku-zi, zoŋ-zi* | 'poorly' |
| *gaŋziŋa* | 'clean' | *gaŋziŋa-zi* | 'cleanly' |

b. | *wac'an-zi* | 'little' | *wac'a* | 'little, few' |
| --- | --- | --- | --- |
| *xoŋto-zi* | 'in another way' | *xoŋto* | 'other' |

Qualitative adverbs derived from adjectives are the principle means to express the qualificative characteristics of an action. They may be cognate with the verb they modify, cf. (671f).

(671) a. | *Xokto-ni* | *ge:-zi* | *ise-pte-ini.* |
| --- | --- | --- |
| track-3SG | bad-INST | see-DEC-3SG |

'The track is poorly visible.'

b. | *Si* | *paki-zi* | *sugzä-ma:-i.* |
| --- | --- | --- |
| you | skilful-INST | fish-V.PAST-2SG |

'You fished skillfully.'

c. | *Bu* | *xuñazi-zi-fi* | *sebzeŋke-zi* |
| --- | --- | --- |
| we.EX | sister-INST-REF.PL | interesting-INST |

gusi-ge-u.
play-PERF-1PL.EX
'We were playing interestingly with my sisters.'

d. | *ŋene-je* | *eke-zi.* |
| --- | --- |
| go-IMP.2SG | slow-INST |

'Go slow.'

e. | *Tukca* | *maŋga-zi* | *simpi-li-e-ni.* |
| --- | --- | --- |
| hare | strong-INST | sneeze-INC-PAST-3SG |

'The hare started sneezing very strongly.'

f. | *Bi* | *anda-i* | *bou-zi* | *bogo:-ni.* |
| --- | --- | --- | --- |
| me | friend-1SG | fat-INST | grow.fat.PAST-3SG |

'My friend grew fat.'

The same derivation is typical of adverbs derived from non-qualificative adjectives of nationality.

(672) a. *Ñoni:*   *si*   *niŋka-zi*   *dian-a-mi?*
        can.2SG   you   Chinese-INST   say-0-INF
        'Can you speak Chinese?'
     b. *Ei* *ima-ŋku-we*   *udie-me-zi*   *ima-si-se.*
        this tell-N-ACC   Udihe-ADJ-INST   tell-IM-PRP.PAS
        'This tale is told in Udihe.'

In some cases the adverb in *-zi* co-occurs with a derived denominal verb and refers to the quality of the base noun incorporated into the verbal form.

(673) *Bi*   *čaligi-zi*   *mo:pti-le-zeŋe-i.*
     me   white-INST   scarf-V-FUR-1SG
     'I will put on a white scarf.' (SKX 84)

Adjectival adverbs derived with the suffix *-zi* show formal parallelism with the Instrumental forms of adjectives used as secondary predicates or depictives (19.6). Yet they contrast semantically and are restricted to a different set of syntactic environments: depictives characterise a subject or object participant and modify a noun phrase, whereas adverbs express the qualificative features of the action itself, and modify the verb. This difference is indirectly shown by the fact that depictive adjectives express Plural agreement with the corresponding argument (19.6.2.3), while adverbs are never morphologically marked for the Plural.

(674) **Xul'a-ŋku-zi*   *sei-de:-ni.*
     extra-PL-INST   salt-V.PAST-3SG
     '(She) put on too much salt.'

10.1.3.1.2. Adverbs derived through conversion

It is noteworthy that adjectival adverbs may be derived simply through the conversion of the base adjective. In this case they correspond to the bare adjectival form.

(675) a. *Aja*   *bagdi-e-ti.*
        good   live-PAST-3PL
        '(They) lived well.'
     b. *aja*   *in'ei*
        good   dog
        'a good dog'

Adjectival adverbs derived from the Instrumental form in *-zi* (10.1.3.1.1) and those derived through the conversion of the bare stem seem to be used interchangeably. Examples of qualificative adverbs derived through conversion are presented in (676). Free variations in the use of these two types of adverbs are illustrated in (677).

(676) a. | *Uta* | *eke* | *ŋene:-k* | *kä:-tigi-ni,* |
|---|---|---|---|
| that | soft | go.PAST-EXPR | side-LAT-3SG |
| *eke* | *xebu-se:-k* | | *seudine-we.* |
| quite | take-EXP.PAST-EXPR | | kerchief-ACC |

'Then (she) came quietly nearer and took the kerchief on the sly.'

b. | *Uligdig'a* | *karasila-sa.* |
|---|---|
| beautiful | paint-PP.PAS |

'It is beautifully painted.'

(677) a. | *Nua-ni* | *min-digi* | *tuge-(zi)* | *gäna:-ni.* |
|---|---|---|---|
| he-3SG | me-ABL | fast-(INST) | walk.PAST-3SG |

'He walked faster than I did.'

b. | *Si* | *zä:-wa* | *xul'a-(zi)* | *bu-o:-i.* |
|---|---|---|---|
| you | money-ACC | extra-(INST) | give-PAST-2SG |

'You gave extra money.'

10.1.3.1.3. Adverbs derived with the suffix *-i*

Certain manner adverbs that normally co-occur with motion verbs are derived with the suffix *-i*. Some of them represent converted forms of the Present active participles.

(678) | *lofo-i* | 'without skis' | *omoc'o-i* | 'constantly' |
|---|---|---|---|
| *sagba-i* | 'barefoot' | *nepte-i* | 'unbuttoned' |
| *kaŋdu-i* | 'in two' | *kaŋdugu-i* | 'a half' |
| *bigze-i* | '(walk) bow-legged' | *xurte-i* | 'headlong (fly)' |
| | | | (K 186) |

Examples:

(679) a. | *Tuxi* | *sikte-ni* | *kaŋdu-i* | *buktag'a.* |
|---|---|---|---|
| sledge | runner-3SG | in.two-ADV | break.PERF |

'The sledge runner broke in two.'

b. | *lofo-i ŋene-* | 'go (through the snow) without skis' |
|---|---|
| *sagbe-i tukä-* | 'run barefoot' |
| *nepte-i xuli-* | 'walk unbuttoned' |

10.1.3.1.4. Adverbs derived with the suffix *-pti(gi)*

The suffix *-pti(gi)~-ktigi* derives manner adverbs often denoting spatial location from verbs and adjectives.

(680)
wani-ptigi	'widely'	*wani-mi*	'wide'
xugu-ptigi	'inside out'	*xugu-*	'turn inside out'
ŋene-ptigi	'sloping, awry'	*ŋene-*	'go'
kuzi-ktigi	'prone' (K 252)	*kuzi-*	'bend down'
kuzu-ptigi	'on the stomach' (Schneider 1937: 120)		
buli-ptigi	'(stroke) from head to tail'	*bule-*	'stroke (an animal)'
kumte-ptigi	'upside down'	*kumte-*	'overturn'
ele-ptigi	'properly, normally' (K 314)	*ele-*	'be sufficient'
ogdo-ptigi	'from side to side'	*ogdo*	'side'
be-ptigi	'alike'	*bu:-fi*	'like'
sebie-pti	'last time'	*sebie*	'before, earlier'

Examples:

(681) a.
Si	*teu*	*kida-ptigi*		*m'ei*	*teluŋu-si:.*
you	all	vice.versa-ADV		only	tell-V.2SG

'You say everything vice-versa.'

b.
ŋene-ptigi-le	*tikpe-ne:-ni* .
go-ADV-CONT	nail-V.PAST-3SG

'He hammered a nail awry.'

c.
Tege-we	*xugu-ptigi*	*teti-e-i*
gown-ACC	inside.out-ADV	dress-PAST-1SG

'I put on the gown inside out'

d.
Bugdi	*ebe*	*nede-isi*	*wani-ptigi*	*nede-i-es*
leg	so	put-PC	wide-ADV	put-PRP-DIS
eu-nigi		*nede-i-es.*		
crossing-ABL		put-PRP-DIS		

'He places his legs like this: now wide apart, then crossing one another.'

10.1.3.1.5. Adverbs derived with the suffix *-lV*

The following adverbs are derived with the suffix *-löu/-löi* (682a) or *-lie* (682b). Whether these affixes are related is hard to say. The latter may go back to the Prolative affix *-li*.

(682)	a.	*logzo-löu*	'arched one's back'
		bugzali-löi	'hopping out'
		zaŋzali-löu	'skipping'
		tekce-löu	'like a black dot' (of an approaching arrow) (K 152)
	b.	*monto-lie*	'in a circle, around', cf. *monto* 'circle'
		cagba-lie	'up, on end'
		mogo-lie	'around', cf. *mogüö* 'round box made of birch bark'
		čiŋdeme-lie	'with a thin waist' (SK 1070), cf. *čiŋdem*

Examples:

(683) a.   *Monto-lie*   *aŋa-ŋisi-e-ti.*
circle-ADV   night.shelter-V-PAST-3PL
'(They) lay down to sleep in a circle.'

b.   *Tukca-ziga ku'ai-we-ni   cagba-lie   düisi:-ti.*
hare-PL   ear-ACC-3SG up-ADV   listen-3PL
'The hares are listening, pricking up their ears.'

c.   *Sul'ai   cugeti-e-ni,   zaŋzali-löu*
fox   be.glad-PAST-3SG   skipping-ADV
tukä-gi-e-ni.
run-REP-PAST-3SG
'The fox was glad and ran back skipping.' (K 162)

10.1.3.1.6. Infinitive conversion

Manner adverbs may be derived through the conversion of the Infinitive in *-mi* (7.5.3.1). The infinitival affix *-mi* is present in such a case in its reduced form *-m*, as commonly occurs in the reduced style of speech (see 2.1.5.3 for phonetic detail). The infinitival form is normally repeated twice, or rarely three times, which brings additional expressivity to the construction in question.

The productivity and the degree of lexicalization of this derivational type is hard to estimate. In principle, virtually every verb can be used in such a way when it denotes an additional alternating or intensive action, cf. the following repeated Infinitives.

(684)   *akpunda-m akpunda-m*   'sweeping'
soŋo-m soŋo-m   'crying'

tukti-m tukti-m	'climbing'
xeti-m xeti-m	'shouting'
c'ofosi-m c'ofosi-m	'scratching'
t'oto-m t'oto-m	'carrying on one's back' (K 174)
zigda-m sigda-m	'glittering' (SK 324)

Examples:

(685) a.   *Koikoikoi*   *c'ofosi-m*   *c'ofosi-m.*
       INTER   scratch-INF   scratch-INF
       'He scratches very much.' (K 51)

     b.   *Soŋo-li-e-ni,*   *soŋo-m soŋo-m*   *soŋo-m*
       cry-INC-PAST-3SG   cry-INF cry-INF   cry-INF
       tompo:-ni.
       spin.PAST-3SG
       'She began to cry, cried and spun around crying.' (K 113)

However, certain expressions of this type are definitely lexicalized as manner adverbs.

(686)   *aja-la-m-aja-la-m*   'properly, very well'
       <good-V-INF-good-V-INF >
       te-kce-m   'sitting for a long time, without moving'
       <sit-DUR-INF>
       kese-m (kese-m)   'hardly, with difficulty'
       <suffer-INF>
       iñe-m-iñe-m   'laughing much'
       <laugh-INF-laugh-INF >

The compound idiomatic expression *sadam-jadam* 'in vain, to no purpose (about speaking)' seems to appear following the same morphological pattern from the verb *sa:-* 'know' and the indefinite proverb *ja-*. Examples are:

(687) a.   *aja-la-m-aja-la-m aisigi-*   'mend very well'
          aja-la-m-aja-la-m kapta-   'wrap very well'
     b.   *te-kce-m te-*   'sit without moving'
       <sit-DUR-INF sit>
     c.   *Kese-m-kese-m*   *tuxi-we*   *uŋkäla:-ni.*
       suffer-INF-suffer-INF   sledge-ACC   carry.PAST-3SG
       'He was carrying the sledge with difficulty.'
     c.   *Kese-m-kese-m*   *bagdi-mi.*
       suffer-INF-suffer-INF   live-1SG
       'I live in torture.'

d. *Sa-da-m*   *ja-da-m*   *tauximdu*   *dian-a-i*
    know-V-INF   PROV-V-INF   at.random   say-0-2SG
    si.
    you
    'You do not know it but speak at random.'

10.1.3.1.7. Other derived adverbs

The (Instrumental) suffix *-zi* can derive manner adverbs from grammatical classes other than adjectives, such as nouns (688), numerals (689), and other adverbs (690).

(688) *begdi-zi*   'on foot'   <foot-INST>
       tege-zi   'dressed'   <gown-INST>

(689) *omo-ti-zi*   'in the same way; similarly' <one-ORD-INST>
       omo-ti-ŋezi   'equally'

(690) *da:s'a*   'near'   *da:s'a-zi*   'briefly'
       go: 'far'   *go:-zi*   'a long time'

Other manner adverbs derived by various morphological means are listed under (691).

(691) *eu-nigi*   'across'   *ei-nigi*   <this-ABL>
       pazi-g'e   'separate(ly)' *pazi*   'separately'
       xufa-lanzi   'all together' *xufa*   'group'
       drug'a-fa, dulug'a-fa 'in two, half' *dul'aŋki-* 'middle' +
                                                           '-*fa* ACC

Examples:

(692) a. *zomi-ndi*   *diga-ini*
           steal-ADV   eat-3SG
           'eats by stealth'
       b. *Zugdi-we-ni*   *drug'a-fa*   *mudi-li-e-ni.*
           house-ACC-3SG   middle-ACC   flood-INC-PAST-3SG
           'Half of the house was flooded.'
       c. *Sexi-we*   *drug'a-fa*   *xazala-ja.*
           cloth-ACC   middle-ACC   cut-IMP.2SG
           'Cut the cloth in two.'

10.1.3.2. Ideophones

Ideophones are a large and distinctive class of manner adverbs in Udihe. They are very expressive and are meant to create a figurative image related to visual, audible or tactile impressions. For this reason they have a special stylistic burden and are typically used in the language of folklore, although some of them are also common in everyday speech. The class of ideophones is of ancient origin. There seem to be no Chinese or other loan words among the Udihe ideophones. Quite a number of them are of Tungus origin and are present in related Tungus languages. We will not attempt here to make any classification of ideophones with respect to sound symbolism and related topics, although obviously such a study would be legitimate. On certain phonetic peculiarities of ideophones see 2.2.1.2, 3.1.1 and 3.6.3.5.

In 10.1.3.2.1 we address the syntactic behavior of ideophones; in 10.1.3.2.2 certain derivational peculiarities are discussed. Their semantics and compatibility potential is addressed in 10.1.3.2.3. A representative list of ideophones is given in Chapter 26.

10.1.3.2.1. Syntactic function

Under certain approaches (for example, Kile 1973; Avrorin 1961: 113), Tungus ideophones are treated as a separate part of speech. However, we find that their syntactic functions are shared by some other manner adverbs, and that there is no reason to analyze ideophones independent of them. Ideophonic adverbs have the following two major syntactic functions: (i) verbal modifiers, and (ii) components of compound adjectives that are mostly used in the predicative position but may function as an attribute as well. Some predicative ideophones take sentential arguments (20.1). In this chapter we address the first "adverbial" function of ideophones, which can be viewed as their prototypical function. Their "adjectival" uses are studied in 17.2.2.6 and 6.4.4.2.3.

Ideophones are sometimes based on onomatopoetic descriptions of sounds; however, they should be distinguished from what we call interjections (12.2.3). Interjections directly express an emotion or sound, and fail to integrate into the syntactic structure at all. Their position in the sentence is absolutely free. Ideophones, on the other hand, somehow characterize verbal action. They are clearly constituents of the clause: first, they can be questioned, and second, they have a rather strict linear position. In the adverbial function ideophones are almost always immediately preverbal or – rarely – immediately postverbal. Unlike interjections, they are compatible with clitic focus particles and in fact take them fairly frequently.

(693) a. *Dili-we-ni*   *kumuge-di:,*   *kumuge-di:,*   *ei*
head-ACC-3SG   louse-V.PRP   louse-V.PRP   this
mamaka   *ŋua-ili*   *kua-kua-gda.*
old.woman   sleep-3SG   snor-snor-FOC
'She sought lice, sought them, till the old woman fell asleep snoring.'

    b. *Tue-we*   *teu*   *tokto:-ni*   *mer-mer-de.*
pole-ACC   all   chop.PAST-3SG   chop-chop-FOC
'He chopped the pole to the ground.' (K 183)

    c. *Teti-gi-si-e-ni*   *kur-kur-de.*
dress-REP-IM-PAST-3SG   quickly-quickly-FOC
'He dressed quickly.' (K 183)

    d. *Xeke-je*   *täŋ-täŋ-da.*
tie-IMP.2SG   fast-fast-FOC
'Tie tightly.'

    e. *Eme-gi-e-ni*   *cau-cau-de.*
come-REP-PAST-3SG   noise-noise-FOC
'He came with noise.'

    f. *Uli-tigi*   *tafak-da*   *tiŋmele:-ni.*
water-LAT   plump-FOC   fall.PAST-3SG
'He fell into water with a plumping noise.'

    g. *Moxo*   *täsi*   *ule:-we*   *nede:-ni*
bowl   very   meat-ACC   put.PAST-3SG
bogdo-bogdo-do.
full-full-FOC
'She put too much meat in the bowl.'

The following example illustrates a rather infrequent word order: the ideophone is separated from the verb by Instrumental nouns.

(694) *Zali*   *piak-piak*   *ule:-zi*   *imo-zi*   *sugza-zi*
barn   full-full   meat-INST   lard-INST   fish-INST
zalu-se   *bi-si-ni.*
pack-PAS.PP   be-PAST-3SG
'The barn was totally full with meat, lard and fish.' (SK 950)

Ideophones may modify an adjective (695a) or somehow characterize the object of the verb (695b).

(695) a. *Mamaka*   *čiŋdem*   *nemneč'e*   *bi-si-ni.*
old.woman   with.thin.waist   thin   be-PAST-3SG
'The old woman had a very thin waist.' (SKX 252)

b. *Gäŋa-gäŋa-gäŋa   baŋcala:-ni.*
whine-whine-whine kick.PAST-3SG
'He kicked (the dog) so that it whined.' (K 112)

10.1.3.2.2. Derivation

Ideophones are not derived from a synchronic point of view, although quite a few of them end in *-m*, which suggests that they may have appeared through the conversion of the Infinitive of ideophonic verbs not preserved in the modern language (cf. 10.1.3.1.2 on the conversion of Infinitives). A large number of ideophones have reduplicated forms, and may sometimes even be repeated three times. Since the non-reduplicated counterpart is typically absent, we will speak of reduplication as a derivational means in this case, as distinct from cases of the expressive repetition of adverbs (10.1.6). Each component of the reduplication bears a separate phonological stress (see also 3.6.3.5). Reduplicated ideophones are written with a hyphen.

In (696) below we present only those non-reduplicated (696a) and reduplicated (696b) ideophones that seem to have related words in Udihe. In (696c) the ideophones that have both a reduplicated and non-reduplicated stem are cited.

(696) a.	*seze-m*	'shaggy'	*seze-ñeñe*	'shaggy'
	pa-m, pa-pa	'black'	*pa-ligi*	'black'
	c'a-m	'white'	*c'a-ligi*	'white'
	kede-m	'spotty'	*kede-ligi*	'spotty'
	päktä-m	'stuck'	*päktäsi-*	'clap with noise'
	puñar	'quickly, like a storm'	*puñu*	'a kind of smoke'
	sakä-ligda-m	'bleeding' (SK 771)	*sakä*	'blood'
b.	*käľ-käľ*	'pale'	*kä-ligi*	'pale'
	zogbom-zogbom	'hardly'	*zogbo*	'hard'
	züle-züle	'stripy'	*zü-ligi*	'stripy'
	bom-bom	'curled'	*bombo-ligi*	'round'
	ŋafu-ŋafu	'thick (of hair); complete'	*ŋafu-ñeñe*	'thick'
	jala:-jala:	'very black'	*jala:*	'coal'
	čif-čif	'wet through'	*čifoŋoi* *čifo-*	'wet', 'get wet through'
	bugdumce-bugdumce	'slippery'	*bugdu*	'slippery'
	lu-lu-lu	'flaming'	*lu*	'quickly'

c.	*bokčom(-bokčom)*	'wrinkled'	*bakča*	'wrinkle'
	bokči(-bokči)	'wrinkled'		
	nir(-nir)	'easy to peal'		
	jiŋ(-jiŋ)	'impudently'		
	tafu(-tafu)	'through'	*t'afa*	'directly' (SK 867)

Some ideophones are derived by reduplication of the final syllable of the base word: *jeŋgute-te(-jeŋgute-te)* 'with rumbling', cf. *jeŋgute-* 'rumble' (SK 71, 421). Generally speaking, expressive reduplication of the final syllable is very typical of ideophons, for example: *lebdeli-li-li-li* 'fluttering', *peso-so* 'the sound made by a drinking female deer', and *počo-čo-čo* 'hissing'.

A few ideophones form compound expressions with the word *ja:* 'eyes', but otherwise behave syntactically as all other ideophonic adverbs, these are:

(697)	*ja: bugdam*	'with round eyes'
	ja: pam	'with black eyes' (from anger)
	ja: kilum	'with suspicious eyes'

Cf. also:

(698) *Meje-i*   *pam*   *tagda:-ni*   *xuda-si: ni:.*
       mind-REF   black   get.angry.PAST-3SG   fur-V.PRP man
       'The merchant got very angry.'

10.1.3.2.3. Ideophones as verbal modifiers

Ideophones seem to fall into two classes depending on the semantic burden they bear. Firstly, some ideophonic adverbs bear a certain content characterizing the action described by the verb. They are compatible with several verbs with various meanings. Such ideophones are presented below with a minimal context.

(699)	a.	*täk-täk gekti-*	'deep freeze'
		täk-täk xeke-	'tightly wind round'
		täk-täk likpi-	'plug tight' (K125)
		täk-täk zawa-	'hold tightly'
		täk-täk obo-lo-	'lock fast'
	b.	*cek-cek alasi-*	'wait in readiness' ,
		cek-cek zawa-si-	'hold something ready'
	c.	*pali-pali zegde-*	'burn till black'
		pali-pali tokö-no-	'black cloudy'
	d.	*pete-pete te:gi-*	'get up quickly' (K 196)
		pete-pete wendi-le-	'throw quickly'

e. *teŋ-teŋ nagbu-si-*   'guess correctly'
   teŋ-teŋ olokto-   'cook in time'
f. *jiŋ(-jiŋ) kaja-*   'send somebody impudently'
   jiŋ(-jiŋ) zawa-   'take away impudently'

Cf. also the following ideophonic adverbs that occur in various contexts: *doŋ-dom* 'upright, straightly', *namu-namu* 'neatly, cozy', *tu(m)-tu(m)* 'silently, quietly', *cili-cili* 'greasy', *tafu(-tafu)* 'through' (of movement), *ŋafu-ŋafu* 'completely', *cem-cem* 'sharp', and some others. A number of ideophones render the audible or visual impression of movement and are compatible with various motion verbs, such as *xuli-* 'walk', *gäna-* 'step', *ŋene-* 'go', *dieli-* 'fly', *tiŋme-* 'fell', *tukä-* 'run', and others. Examples:

(700) a. *Men-e*   *zug-du-i*   *namu-namu*   *te:-mi.*
         REF-0   house-DAT-REF   cozy-cozy   sit-1SG
         'I am sitting cozily at home.'

      b. *Uŋna*   *neki*   *täk-täk*   *gekti:-ni.*
         snow.crust   spring   strong-strong   freeze-3SG
         'The snow crust in spring freezes fast.'

      c. *Mamaka*   *wopti-we*   *täŋ-täŋ*
         old.woman   door-ACC   strong-strong
         obo-lo-gi-e-ni.
         lock-V-REP-PAST-3SG
         'The old woman locked the door fast.'

      d. *Ba:-la*   *pali-pali*   *tokö-no:-ni.*
         place-LOC   black-black   cloud-V.PAST-3SG
         'Very black clouds are outside.'

      e. *ŋafu-ŋafu*   *bude-kte:-ti.*
         complete-complete   die-DIS.PAST-3PL
         '(They) all died out.'

(701) a. *Lefule-zi*   *zaka:-ni,*   *tuxi*
         fluffy-INST   snow.powder.PAST-3SG   sledge
         bugdumce-bugdumce   *ŋene-ini.*
         slide-slide   go-3SG
         'It is powdered with fluffy snow, the sledge slides well.'

      b. *Ugli*   *uli-tigi*   *tiŋme:-ni*   *cau.*
         coal   water-LAT   fell.PAST-3SG   hiss
         'The coal fell into water with a hissing noise.'

      c. *Mamaka-ni*   *sembele-sembele*
         old.woman-3SG   immediately-immediately
         tukä:-ni.
         run.PAST-3SG
         'The old woman ran immediately.'

On the other hand, most ideophonic adverbs have a very restricted distribution: each combines with a closed class of semantically similar verbs. Ideophonic adverbs of this type are semantically "light": when they co-occur with the verb their only semantic function is to denote a high degree of the realization of the action while the main semantic burden lies on the verb itself. In fact, they can be viewed as degree adverbs. Lacking a better option we may gloss them by the repetition of the verbal stem.

(702) a. *Bäsa*   *kuakta-kuakta*   *ogo:-ni.*
           stream   dry-dry   dry.PAST-3SG
           'The stream dried entirely.'

       b. *Lumda-lumda*   *guza-li-e:-mi*   *bi*   *tege-i.*
           torn-torn   tear-INC-PAST-1SG   me   gown-REF
           'I tore my gown very much.'

       c. *Zeu-we*   *kofi-kofi*   *diga:-mi.*
           food-ACC   eat-eat   eat.PAST-1SG
           'I ate all the food completely.'

       d. *Zugdi-ni*   *xaulum*   *mude:-ni.*
           house-3SG   flooded   flood.PAST-3SG
           'The house was entirely flooded.'

Note, however, that when semantically light ideophones are used in the predicative function they are combined with semantically neutral copulas (*bi-* 'be', *wo:-* 'make', *ede-* 'become', *nixe-* 'do') and bear the semantic information on their own (17.2.2.6).

Below we present a list of collocations of degree ideophones with verbs, which to some extent constitute 'frozen' idiomatic combinations. On some occasions the ideophone may be cognate with the compatible verb (703b).

(703) a. *lü-lü ñukto-*   'get wet through'
           zaŋa-zaŋa su:le-   'be ill (in bed)'
           zoŋgo-zoŋgo lukta-   'strip to the skin'
           čifu-čifu ñukto-   'get wet through'
           čif-čif nielesi-   'bathe in sweat'
           dakcai-dakcai dieli-   'fly flapping wings'
           sokcom tegi-   'stand on end (of hair, fur)'
           bom-bom bokčogi-   'curl oneself'
           ko:ŋko-ko:ŋko dieli-   'fly flapping wings (of large birds)'
           sou-sou eikpesi-   'pant with running'
           pigdäm nüxan-   'stick inside'
           sifall degde-   'go up (of dust)'
           gäŋdu-gäŋdu xaji-   'break completely'
           kulu-kulu tetu-   'dress completely'
           lokto-lokto tanda-   'torn off by jerks'

oŋom tiŋme-	'fall off in shreds (of fur)'
pou-pou tamña-	'dark with fog'
xeku-xeku xetige-	'jump much'
gäll xui-	'boil to pulp'
ceŋe-ceŋe lo:-	'hang swinging'
jifu-jifu deu-	'get terribly tired'
nir(-nir) ŋene-	'scale off easily (of fish skin)'
päktam lagbana-	'stick immediately'
xaŋga-xaŋga si:-	'squeeze till dry'
piek-čik tugbu-	'fall with noise'
kuak-kuak xuanti-,	
kuak-kuak ŋua-	'sleep snoring'
pice-pice tugbu-,	
pice-pice cemne-	'smash into smithereens'
wekte-wekte teu-,	
wekte-wekte taigi-	'lump up to the top'
gäga-gäga	
(or *zäka-zäka) e:me-*	'show up from growling (of dog's teeth)'
käl-käl ŋele-	'become frightened so that one gets pale'
kofi-kofi umi- or *diga-*	'drink or eat something without leftovers'

b.	*kiŋde-kiŋde kiŋdesi-*	'break everything' (K 111)
	čiŋu-čiŋu čiŋosi-	'swing swinging' (K 122)

Examples:

(704) a. *Xeigi*   *telepti-we*   *tanda-mi*   *zeŋge-zeŋge*
pants   lace-ACC   pull-INF   swinging-swinging
lo:-ni   *beliente.*
hang.PAST-3SG   fairy
'Having pulled out the pants-lace the fairy hung herself swinging.'

b. *Xegise-li*   *ko:ŋko-ko:ŋko*   *dieli:-ni.*
down-PROL   clap-clap   fly-3SG
'(It) is flying down flapping its wings.'

c. *Tuxi-we*   *gändu-gändu*   *xaji-e-ni.*
sledge-ACC   brake-brake   brake-PAST-3SG
'He broke the sledge completely.'

10.1.4.Degree adverbs

On focus particles as degree adverbs see Chapter 12; on ideophones functioning as degree adverbs in individualized verbal expressions see 10.1.3.2.3.

10.1.4.1. Degree adverbs in the adjectival or adverbial phrase

Degree adverbs used within the adjectival phrase (6.3) or adverbial phrase (10.1.7) are listed under (705).

(705)

c'o	'the most'
lä, läs(i), as(i)	'very'
belem	'(even) more; completely'
zuke	'hardly'
j'eu ba:la-ni	'much more, a lot'
ñaŋga	'a little'
cofu	'completely'
ketu	'very'
cum	'completely' (only of colors)
seuni:	'terribly, very much'

C'o participates in the superlative adjectival and adverbial constructions (see 6.3.6 and 10.1.7.3). It may modify a few non-qualificative adjectives, cf.: *c'o ñoxo* 'the very first', *c'o amäi* 'the very last'. The adverbial expression *j'eu ba:-la-ni* expresses measure in comparative constructions (6.3.4 and 10.1.7.3). The element *ba:-la-ni* probably goes back to the 3rd person Singular possessive Locative form of the noun *ba:* 'place, nature'.

(706)

Nua-ni	*min-digi*	*j'eu*	*ba:-la-ni*	*gugda.*
he-3SG	me-ABL	what	place-LOC-3SG	tall

'He is a lot taller than me.'

The adverb *belem* '(even) more' is also typical of adjectival and adverbial comparative constructions (707), normally when the standard of comparison remains unexpressed (708). It may also mean 'completely' (709). In the Northern dialect it seems to correspond to *badi*, as illustrated in (710).

(707) a.

Bi	*ag'a-i*	*belem*	*sagdi*	*min-digi-de.*
me	brother-1SG	more	big	me-ABL-FOC

'My brother is even taller than me.'

b. *Si   egdi-laŋki wa:-i*   *bi   sin-digi*
you many-ADJ kill.PAST-2SG   me   you-ABL
belem   egdi-me   wa-zaŋa-i.
more   many-ACC   kill-FUT-1SG
'You killed very many (birds), and I will kill even more than you.'

(708) a. *Belem   maŋga   tigde-li-e-ni.*
more   strong rain-INC-PAST-3SG
'It started raining even more strongly.'

b. *Nua-ni   belem   igdi-zi   soŋo-li-ge.*
he-3SG more   loud-INST   cry-INC-PERF
'He cried even more loudly.'

(709) *Bi   zugdi: belem   da:mpi ede:-ni.*
me   house.1SG   very   old   become.PAST-3SG
'My house became very (completely) cold.'

(710) *Jegdige   badi   maŋga   tagda:-ni.*
hero   even   strong   get.angry.PAST-3SG
'The hero got even more angry.' (K 149)

Degree adverbs *c'o* 'the most' and *belem* 'completely' are compatible with some nouns that have parametric component in their semantics (see 13.8). The degree adverb *lä* 'very' in its different phonological forms modifies adjectives (711) and quantifiers (712). It also functions as a quantifier itself within a noun phrase (11.2.1) and as a verbal modifier (10.1.4.2).

(711) a. *Lä   negze   zugdi   do-lo-ni*
very   light   house   inside-LOC-3SG
'It is very light in the house.'

b. *asi   käŋgas'a*
very   narrow
'very narrow'

c. *Nekiasi   aja.*
spring   very   good
'It is very nice in spring.'

(712) a. *Läsi   egdi-we   zeu-we   olokto:-ti.*
very   much-ACC   food-ACC   cook.PAST-3PL
'(They) cooked very much food.'

b. *Läsi   egdi   tukca   eme-kte:-ti.*
very   many   hare   come-DIS.PAST-3PL
'There came very many hares.'

The adverb *ñaŋga* may modify other adverbs but not an adjective. Under the scope of negation it may have the meaning 'at all, not at the least', cf. (713c). On its quantificational function see 11.2.1.

(713) a. *Min-du*   *mäna-wa*   *ñaŋga*   *xul'a-ka*
          me-DAT   flour-ACC   little   extra-FOC
          ceŋgele-je.
          weight-IMP.2SG
          'Weigh a little more flour for me.'
      b. *Ñaŋga*   *bazie*   *eme*   *bi-si!*
          little   early   come   be-PAST
          'If only I had come a little earlier!'
      c. *Ei*   *zikte*   *ñaŋga-da*   *e-ini*   *zei.*
          this   blueberry   little-FOC   NEG-3SG   sweet
          'This blueberry is not at all sweet.'

Zuke 'hardly' commonly serves as a verbal modifier (10.1.4.2), but can also be used with certain predicative adjectives, cf. *zuke inigi* 'hardly alive'. *Ketu* 'very' is compatible with adjectives (714), when it seems to be synonymous with *lä*, with adjectival adverbs (715), and quantifiers (716).

(714) a. *ketu iŋini*   'very cold'
      b. *Käŋa*   *ule:-ni*   *ketu*   *xei.*
          deer   meat-3SG   very   tasty
          'Deer's meat is very tasty.'

(715) *Bi*   *ketu*   *ge:-(zi)*   *ŋua-mi.*
      me   very   bad-(INST)   sleep-1SG
      'I sleep very badly.'

(716) *Si*   *ono*   *wa:-i*   *ketu*   *läsi*   *čind'a-wa?*
      you   how   kill.PAST-2SG   very   many   bird-ACC
      'How did you (manage to) kill so many birds?'

The adverb *seuni:* 'very' goes back to the homophonous adjective meaning 'terrible, scary'. It functions as a degree adverb within the adjective or adverbial phrase (717) or as a quantifier 'very much, very many' (718).

(717) a. *seuni: ge:*   'terribly bad'
          <terrible bad>
      b. *seuni: tuge-zi*   'terribly quickly' (SKX 190)
          <terrible quick-INST>

(718) *Bi*   *emugde-di:*   *seuni:*   *sugzä*
       me   stomach-DAT.1SG   terrible   fish
       bie.
       be.PRES.HAB
       'There are very many fish in my stomach.' (SKX 260)

10.1.4.2. Verbal modifiers

Degree adverbs used as verbal modifiers are listed under (719).

(719) *ŋaŋga*   'a little, slightly'   *zuke*   'hardly'
       ŋaŋga ŋaŋga(i)   'a little bit'   *ketige*   'nearly, almost'
       läs(i), lä, as(i)   'very'   *belem*   '(even) more'
       elusim(e)   'entirely, completely'   *kufula*   'entirely'
       kaŋdui   'till half'   *meŋde*   'as a whole'
       durug'afa   'partly, till half, in two'
       eledexi   'very much (of eating)'   ← *ele dexi* <enough till>

Combined with a verb *belem* expresses a high intensity with the presupposition that the action has already taken place (720). *Ñaŋga* and *läsi* are antonymous: the former denotes a little intensity (721) and the latter a high intensity (722) of the action.

(720) a. *Xuda-si:*   *ni:*   *belem*   *tagda:-ni.*
           fur-V.PRP   man   more   get.angry.PAST-3SG
           'The merchant got even more angry.'
       b. *ŋene-mie*   *ŋene-mie*   *belem*   *amba-na:-ni.*
           go-INF   go-INF   more   evil.spirit-V.PAST-3SG
           'He was walking, walking and turning more and more into an evil spirit.' (SK 201)

(721) *Bi*   *uta-wa*   *kese-u-si-zeŋe-i*   *ñaŋga-da.*
       me   that-ACC   torture-CAUS-IM-FUT-1SG   little-FOC
       'I will torture her a little.'

(722) a. *Ogbö*   *läs(i)*   *tukä-ini.*
           elk   very   run-3SG
           'The elk runs quickly.
       b. *Bi*   *men-e*   *mamasa-i*   *läs(i)*   *aju-mi.*
           me   REF-0   wife-REF   very   love-1SG
           'I love my wife very much.'

c. *Läs(i)*   *gakti:-ni.*
   very   freeze-3SG
   'It freezes very much.'

Ketige 'almost, nearly' signifies that the (perfective) event has not reached its natural limit (723). Examples of other degree adverbs are given under (724).

(723) a. *Ketige*   *wa:-ti*   *ŋamakta,*   *ŋamakta-zi*
         almost   kill.PAST-3PL mosquito   mosquito-INST
         susa-gi-e-ni.
         escape-REP-PAST-3SG
         'The mosquitoes nearly ate (him), he barely escaped.'

      b. *Mokt'oi-le*   *ketige* *ine:-ni.*
         forest-LOC   almost   enter.PAST-3SG
         'He almost entered the forest.'

(724) a. *Kaŋdui*   *ikte-me-ze.*
         till.half   tooth-V-SUBJ
         'You'll bite off half (of it).'

      b. *In'ei-de*   *kaŋdui*   *esi-gi-e-ni,*
         dog-FOC   till.half   become-REP-PAST-3SG
         dili-ni   *belie.*
         head-3SG   fairy
         'Half (of her) became a dog, (but) her head is a girl's.' (K 110)

      c. *Zugdi-we-ni*   *durug'afa*   *mudi-li-e-ni.*
         house-ACC-3SG   half   flood-INC-PAST-3SG
         'His house was flooded till half.'

      d. *omo siguli meŋde*   'one whole squash'
         <one squash whole>

      e. *Uti waŋba-ŋi-ni*   *zawa-mi*
         that tortoise-AL-3SG   take-INF
         niŋme:-ni   *seutige-we*   *mende-de,*
         swallow.PAST-3SG pine.cone-ACC   whole-FOC
         niŋme:-ni   *mende-de.*
         swallow.PAST-3SG whole-FOC
         'Tortoise picked it up and swallowed the whole pine cone, it swallowed it whole.'

      f. *Drug'afa*   *xua-je.*
         half   cut-IMP.2SG
         'Cut in two.'

      g. *Drug'afa*   *bu:-je*   *min-du.*
         half   give-IMP.2SG   me-DAT
         'Give me half (of it).'

10.1.5. Idiomatic adverbial expressions

Spatial and temporal adverbs form fixed combinations in which the order of the adverbs cannot be violated. The following parallel constructions have roughly the same meaning. They denote the passage of time in traditional folklore, and can be rendered as 'some time passed; far and near; by and by; sooner or later'.

(725) *go: da:*   <far close>
     we:-ke go:(-ko)   <top-FOC far-FOC>
     go:-lo da:-la   <far-LOC close-LOC>
     we:-de go:-do   <top-FOC far-FOC>
     go:-ko da:-ka   <far-FOC close-FOC>
     go:-mo da:-ma   <far-ACC close-ACC>

The elements of idiomatic constructions may be combined with a verb in parallel use, as in (726c).

(726) a. *Wo:-ko*   *go:-ko*   *bi:,*   *bagdi:,*
     top-FOC   far-FOC   be.PRP   live.PRR
     sita-na-mi-de   *b'a-ti.*
     child-PL-REF-FOC   get.PAST-3PL
     'They lived for a time, and by and by they gave birth to children.'
  b. *We:-de*   *go:-do*   *bi-mi*   *ali-de*
     top-FOC   far-FOC   be-INF   when-IND
     sin-e-we   *b'a-gi:*   *xai*   *diga-na-zaŋa-fi.*
     you-0-ACC find-REP.PRP still   eat-DIR-FUT-1PL.IN
     'Sooner or later we'll find you and eat you up anyway.'
  c. *Da:-la*   *ŋene:-ti-es*   *go:-lo*
     close-LOC   go.PAST-3PL-DIS   far-LOC
     ŋene:-ti-es   *we:-le*   *i:ŋ-ki-ti.*
     go.PAST-3PL-DIS hill-LOC   come-PAST-3PL
     'They traveled far and near, until they came to a hill.'

Cf. also a "frozen" adverbial expression *go:-do ei(-mi) bie* 'soon; near' <long-FOC NEG-INF be.PRES.HAB>.

Other idiomatic adverbial expressions used in everyday speech are as follows:

(727) *dogbo-ni ineŋi-ni*   'day and night'.
     timadula timadule   'next morning'
     j'eu baita-ni j'eu zuge-ni   'why, what for'
     <what reason-3SG what business-3SG>
     kä:-la ŋene-ze-m(i)   'close'
     <close-LOC go-SUBJ-1SG>

For example:

(728)　*J'eu　baita-ni*　　*j'eu　zuge-ni　　eme:-ni?*
　　　　what　reason-3SG　　what　business-3SG　come.PAST-3SG
　　　　'Why did he come?'

.

10.1.6. Reduplication of adverbs as a stylistic means

A number of indefinite time and manner adverbs (other than the converted Infinitives, on which see 10.1.3.1.2) may be repeated twice. This reduplication cannot be viewed as a derivational process, since the regular manner and time adverbs normally occur in a non-repeated form. Accordingly, it is mot written with the hyphen here, as distinct from lexicalized reduplications. The reduplication in question is a stylistic means of expressivity. It is known cross-linguistically, but is especially frequent in Udihe. In the simplest case the meaning of the repeated adverb is simply intensified (729), or it may slightly change (730).

(729)　*go: go:*　　　　　'very long'　　　*go:*　　　'long'
　　　　bei bei　　　　　'to no purpose'　*bei*　　　'in vain'
　　　　xele xele　　　　'very quickly'　　*xele*　　'quickly'
　　　　läta läta　　　　'very loudly'　　*läta*　　'loudly'
　　　　tiezi tiezi　　　　'in pairs'　　　*tie-zi*　　'pair'
　　　　sila sila　　　　'hardly'　　　　*sila*　　'hardly'
　　　　anana anana　　'long-long ago'　*anana*　'long ago'
　　　　ñaŋga ñaŋga(i)　'very little'　　*ñaŋga*　'a little'
　　　　mogolie mogolie　'around,　　　*mogolie*　'around'
　　　　　　　　　　　　from all sides'

(730)　*aja aja*　　　　　'thoroughly,　　*aja*　　　'well'
　　　　　　　　　　　　properly'
　　　　ebede ebede　　'so and so'　　　*ebede*　　'so'
　　　　xaulie xaulie　　'anyhow'　　　*xaulie*　　'please'
　　　　ele-le (< ele-ele)　'just'　　　　*ele*　　　'soon'
　　　　zuke zuke　　　'with　　　　　*zuke*　　'hardly'
　　　　　　　　　　　　difficulty'
　　　　wac'anzi wac'anzi　'little by little'　*wac'an-zi*　'a little'
　　　　emne emne　　'seldom,　　　*emne*　　'once'
　　　　　　　　　　　　sometimes'
　　　　ñaŋgama ñaŋgama　'little by little'　*ñaŋga-ma*　'a little'
　　　　wac'ama wac'ama　'little by little'　*wac'a-ma*　'a little'
　　　　ajalama ajalama　'properly'　　*ajala-ma*　'very
　　　　　　　　　　　　　　　　　　　　　good'

dolo dolo	'in the very middle'	*dolo*	'inside'

Examples are presented below. Qualificative adverbs derived from adjectives with the Instrumental marker *-zi* sometimes undergo only partial repetition: the Instrumental marker is lacking on the first component, as shown in (731f).

(731) a. *Zuke   zuke   gäna-ini.*
       hardly   hardly step-3SG
       'He has difficulty walking.'

    b. *Tege   go: go: teisi:-ni.*
       gown   long   long   wear-3SG
       'The gown can be worn for a long time.'

    c. *Mamasa   emne   emne   tagd'a-si*
       old.woman once   once   get.angry.PERF-PC
       bie.
       be.PRES.HAB
       'The old woman is angry sometimes.'

    d. *Ñaŋga   ñaŋgai   ikte-me-nde:-ni.*
       little   little   tooth-V-SEM.PAST-3SG
       'He bit off a little bit.'

    e. *Ñaŋga   ñaŋga omo   mo:-wo   tinda:-ni.*
       little   little   one   tree-ACC   cut.PAST-3SG
       'He cut one tree a little bit.'

    f. *Mo: tene nemnec'e   nemnec'e-zi   ise-pte-ini.*
       tree CONT thin   thin-INST   see-DEC-3SG
       'And the trees are seen very thin.'

10.1.7. General properties of the adverbial phrase

10.1.7.1. Position and co-occurrence of adverbials

In this section we address not only independent adverbs, but also noun phrases with an adverbial function (15.4) and postpositional phrases (10.2.3). In general, there is a certain freedom of adverbial positioning, as long as the main requirement of Udihe word order, the preverbal position of the focus element (24.1.1), is satisfied. Clausal adjuncts with a temporal or spatial meaning, as a rule, occur sentence-initially (732), although they may follow the subject (733). On the position of the adverbial subordinate clause see Chapter 21.

(732) a.   *Mo:*   *due*   *g'e-fe*   *čind'a*   *ketu*   *egdi*
           tree   top   surface-ACC   bird   very   many
           do:-ti.
           perch-3PL
           'Many birds perched all over the top of the tree.'
      b.   *Zua*   *ŋamakta*   *läsi*   *egdi.*
           summer   mosquito   very   many
           'There are a lot of mosquitoes in the summer.'

(733) a.   *Niŋka*   *anana*   *udie-du*   *sexi-we*
           Chinese   long.ago   Udihe-DAT   cloth-ACC
           xuda-si-e-ni.
           fur-V-PAST-3SG
           'Earlier, the Chinese used to sell cloth to the Udihe.'
      b.   *Udie*   *maŋmu*   *omo*   *bua-du*
           Udihe   Nanai   one   place-DAT
           wakca:-ti.
           hunt.PAST-3PL
           'The Udihe and the Nanai used to hunt in the same place.'

There are no constraints on the co-occurrence of various types of adverbials, but seldom does more than one clausal adverbial occur in a sentence. Typically two spatial or temporal adverbs are present when one of them gives details about the meaning of the other.

(734) a.   *Caŋa*   *g'e-fe*   *wei-xi*   *gobod'o*   *xuli:-ni.*
           wall   surface-ACC   up-LAT   fly   go-3SG
           'A fly goes up the wall.'
      b.   *Zueze*   *we:-li-ni*   *g'e-fe*   *gobod'o*
           table   top-PROL-3SG   surface-ACC   fly
           xuli:-ni.
           go-3SG
           'A fly goes all over the table.'
      c.   *Ta:mati*   *tue-ni*   *ima:*   *wac'a*   *bi-s'e.*
           last.year   winter-3SG   snow   little   be-PERF
           There was not much snow last winter.'

There does not seem to be a neutral mutual order for temporal and spatial adverbials. The spatial adverbial may precede (735a) or follow (735b) temporal adverbial.

(735) a.   *Minti*   *zugdi-du-fi*   *tutulu*   *asi*   *aja.*
           we.IN   house-DAT-1PL.IN   always   very   nice
           'It is always very nice in our house.'

b. *Bai*   *zuke*   *dogbo*   *dulaŋki-le-ni*   *zuk-tigi*
    in.vain   hardly   night   middle-LOC-3SG   house-LAT
    eme-gi-e-ni.
    come-REP-PAST-3SG
    'In vain he returned home with difficulty in the middle of the
    night.'

Verbal modifiers typically stand before the finite predicate (736), which follows from their inherent association with a focus. Yet they may be separated from the verb by verbal arguments (737), and may even be postposed immediately after it when the verb itself bears the focus function (738).

(736) a. *Nua-ni*   *igdi-zi*   *soŋo-li-ge.*
          he-3SG   loud-INST   cry-INC-PERF
          'He started crying loudly.'

      b. *Min-du*   *zugdi-we*   *pug'a*   *wo:-ti.*
          me-DAT   house-ACC   separately   make.PAST-3PL
          'They built a house for me separately.'

(737) a. *Bi*   *endemi*   *moxo-wo*   *xajie-mi.*
          me   by.accident   bowl-ACC   break-PAST-1SG
          'I broke the bowl by accident.'

      b. *Kei*   *sin-tigi*   *tagda:-ni.*
          right   you-LAT   get.angry.PAST-3SG
          'You deserve having him get angry with you.'

(738) a. *Kusige-we*   *ziugi-e*   *aja-zi-de.*
          knife-ACC   sharpen-IMP.2SG   good-INST-FOC
          'Sharpen the knife well.'

      b. *Ima-ŋku-we*   *ima-si-e-mi*   *drug'afa-da,*
          tell-N-ACC   tell-V-PAST-1SG   half-FOC
          e-si-mi   *metu.*
          NEG-PAST-1SG   finish
          'I told the tale until the middle, did not finish it.'

Two adverbs co-occur within one adverbial phrase when one of them modifies the other (10.1.7.2). Three adverbials within one phrase are allowed only in comparative constructions, when one of them corresponds to the standard of comparison and the other to the measure of comparison (see example (740b) below); otherwise, more than two adverbs within one phrase are not allowed.

10.1.7.2. Adverbial modifiers

Degree adverbs that function as adverbial modifiers are listed in 10.1.4.1. Within the adverbial phrase the adverbial modifiers precede the head adverb whatever its position with respect to the main verb, cf.:

(739) a. *Etete-ini   ketu   siziga.*
work-3SG   very   diligent
'He works very diligently.'

b. *Bi   läsi   maŋga dew-o:-mi.*
me   very   strong get.tired-PAST-1SG
'I got very tired.'

The other acceptable types of secondary adverbial modification are focus particles with the meanings 'also', 'very' (on these see Chapter 12), some restrictive particles (12.1.1.11.4), and the noun phrase that corresponds to standard of comparison (10.1.7.3).

10.1.7.3. Comparative adverbial phrase

Comparison within an adverbial phrase headed by a qualificative adverb is expressed by purely syntactic means, namely, with the Ablative case-marked noun phrase denoting the standard of comparison. As for adjectives (6.3.4), degrees of comparison are not encoded morphologically on the adverb itself. The standard of comparison most typically precedes the adverb (740) but may also be postponed to the postverbal position (741).

(740) a. *min-digi   xegie-fe*
me-ABL   above-ACC
'higher than me'

b. *Bi   sin-digi   j'eu   ba:-la-ni*
me you-ABL   what   place-LOC-3SG
ca-ixi   xuli-se:-mi.
far-LAT   go-EXP.PAST-1SG
'I have traveled much further than you.'

c. *Nua-ni   min-digi   go:-lo   xetigeŋ-ki-ni.*
he-3SG   me-ABL   far-LOC   jump-PAST-3SG
'He jumped further than me.'

d. *Bi   ei   in'ei-we   xoŋto   in'ei-digi   aja*
me   this   dog-ACC   other   dog-ABL   good
aju-mi.
love-1SG
'I love this dog more than the other.'

(741) *Bi   ei ketu   aja-zi   ŋua-mi   zulie-fi-digi.*
       me this very   good-INST   sleep-1SG   before-ADJ-ABL
       'I sleep now better than before.'

The superlative degree is signified by means of the superlative degree adverb *c'o* 'the most':

(742) a. *c'o cai-xi*   'farthest of all'
           <most far-LAT>

       b. *Bi   c'o   ñoxo   ili-mi.*
           me most   first   get.up-1SG
           'I am the first to get up.'

       c. *Bi   c'o   ñoxo   wa:-mi   käŋa-wa   bi*
           me most   first   kill.PAST-1SG   deer-ACC   me
           uteliŋeni   za: zakpu se: bi-s'e-i.
           then   ten   eight year   be-PERF-1SG
           'I killed my very first deer when I was eighteen years old.'

       d. *C'o   amä:-li   omo   sul'ai   bie.*
           most   back-PROL   one   fox   be.PRES.HAB
           'The last one was a fox.' (SK 101)

10.1.7.4. Adverbs that take arguments

Only a few adverbs take an argument. The argument normally precedes the adverb, but this is not necessary, cf. (743d).

(743) a. *Min-zi   go:-lo   a-ta-u   susa.*
           be-INST   far-LOC   NEG-SUBJ-2PL   escape
           'You won't escape far from me.' (SKX 110)

       b. *Uli   kä:-digi-ni   go:-lo   ŋene-isi-ni   mafa*
           river   side-ABL-3SG far-LOC   go-PC-3SG   bear
           Egule   ilaktaŋ-ki-ni.
           Egule   appear-PAST-3SG
           'After he went far from the river bank, the bear Egule appeared.' (SK 245)

       c. *Nua-ni   tu: ŋene-isi-ni   mo:-tigi   das'a*
           he-3SG   all   go-PC-3SG   tree-LAT   close
           osi:-ni.
           become-3SG
           'He was walking, it was already close to the tree.' (SK 272)

       d. *Caixi   e-zi   xuli   auŋa-digi.*
           far   NEG-IMP.2SG go   night.shelter-ABL
           'Don't go far away from the night shelter.' (SK 252)

10.2. Postpositions

Postpositions in Udihe are easily distinguished from case affixes as independent words: they do not follow vowel harmony, are longer and bear a separate phonological stress. Normally they have an internal morphological structure and can be stranded under coordination, as distinct from case affixes (10.2.3). Postpositions combine with a noun to make a larger constituent (a postpositional phrase), typically with an adverbial function. Formally they fall into two large classes: morphologically changeable (10.2.1) and morphologically unchangeable (10.2.2) postpositions. The formers have developed as a result of the grammaticalization of the case forms of (spatial) nominals, and preserve certain morphological categories of nouns (case, possessive). Typically the latter are without nominal counterparts. In the corresponding sections both types of postpositions are represented in fairly exhaustive lists. The general properties of a postpositional phrase are addressed in 10.2.3. On case marking of postpositions see 24.2.1.2.3.

10.2.1. Changeable postpositions

10.2.1.1. Derivation

Changeable postpositions go back to the possessive case forms of nouns. Typically they are derived from the same spatial stems that are employed in the adverbial derivation (10.1.1). Although for most postpositions the corresponding noun is not attested in the modern language, in certain cases the derivational relationship is still preserved. So some postpositions and base nouns coexist, but demonstrate different categorial properties. In particular, spatial nouns may take cases not typical of postpositions (the Accusative in *-wA/-mA*, the Nominative, and the Destinative) and may be modified like other nouns, which is absolutely impossible in the case of postpositions. As distinct from nominal stems, the changeable postpositions never occur without possessive inflections and case markers. Finally, nouns and the corresponding postpositions may differ slightly in meaning, the meaning of the postposition being more abstract, cf. examples (a) and (b) below.

(744) a. *Bi   moxo-i   kä:-wa-ni   xaji-e-ti.*
         me   cup   edge-ACC-3SG   break-PAST-3PL
         'They broke the edge of my cup.'
      b. *Eme-i   bi   kä:-la-i.*
         come-IMP.2SG   me   side-LOC-1SG
         'Come up to me.'

(745) a. *Ño:ndu*   *ñuga-si-ie*   *bi*   *tada-i*
         first   kiss-IM-IMP.2SG   me   arrow-1SG
         due-we-ni.
         point-ACC-3SG
         'First kiss the point of my arrow.'

     b. *Mo:*   *due-digi-ni*   *eugi-e-mi.*
         tree   top-ABL-3SG   come.down-PAST-1SG
         'I came down from the tree.'

Among postpositional stems quite a few belong to the *n*-final class II (746a), while others have a vowel-final stem (746b).

(746) a. *xo:n-*   'top'
         ño:n-   'front'
         agdan-   'between'
     b. *aka-*   'back', cf. the noun *aka* 'back (body part)'
         ca:-   'behind'
         e:-   'near', cf. the noun *e:* 'side'

Some postpositions are derived from spatial nouns with the suffix *-(u)zA* (5.1.2.4).

(747) *solie-ze*   'upstream'
     ezie-ze   'downstream'
     ta-uze-   'behind', cf. *ta-* 'that'
     a-uze-   'this side', cf. *a-* 'this'

Other postpositions have derivational suffixes *-ŋki/-ŋkA* (748a) and *-tA* (748b) with an unclear meaning. The morphologically unmarked counterpart may be absent.

(748) a. *ta-ŋki-le-ni*   'in the center', cf. Nanai *tokon-doa-ni*
       dula-ŋki-le-ni   'in the middle', cf. Nanai *dolin-doa-*
       ga-ŋki-ni   'during'
       di:-ŋki-ni   'as large as'
       xe:-ŋki-ni   'nearly'
       dali-ŋka-ndi-ni 'thanks to', cf. *dali-ndi-ni* 'thanks to'
     b. *zulie-te-li-ni*   'before'   *zulie-te*   'before'
       amä:-ta   'behind'   *amä:-la-ni* 'before'

10.2.1.2. Inflection

Spatial postpositions form case and possessive paradigms. Other changeable postpositions inflect for the possessive, but do not have extensive case paradigms and are usually present in one "frozen" case form.

10.2.1.2.1. Case inflection

Changeable postpositions with a spatial meaning take the Dative, Locative, Lative, Prolative and Ablative cases. They are formed with regular nominal case suffixes of class I or class II, depending on the stem type (4.1.1), although, like for nouns, a certain inconsistency is observed, cf. *xo:-lo-ni* and *xo:n-dule-ni* 'on' <top-LOC-3SG>. In the Dative the adverbial suffix *-ni* may be present instead of the regular *-du*. The case forms have basically the same meaning as for nouns (4.2.2).

In the table below we present illustrative paradigms for certain spatial postpositions in the 3rd person Singular form. The declension of other postpositions is completely analogous. Lacunas are marked with a hyphen.

Table 12. Inflection of postpositions

	'downstream'	'near'	'across the river'
DAT	-	*kä:-ni-ni*	-
LAT	*ezize-tigi-ni*	*kä:-tigi-ni*	*bagä:za-tigi-ni*
LOC	*ezize-le-ni*	*kä:-le-ni*	*bagä:za-le-ni*
PROL	*ezize-li-ni*	*kä:-li-ni*	*bagä:za-li-ni*
ABL	*ezize-digi-ni*	*kä:-digi-ni*	*bagä:za-digi-ni*

	'on the end (top)'	'in the middle, in the center'	'behind, there'	'here, on this side'
DAT	-	*taŋki-du-ni*	-	-
LAT	*due-tigi-ni*	*taŋki-tigi-ni*	*tauze-tigi-ni*	*auze-tigi-ni*
LOC	*due-le-ni*	*taŋki-le-ni*	*tauze-le-ni*	*auze-le-ni*
PROL	*due-li-ni*	*taŋki-li-ni*	*tauze-li-ni*	*auze-li-ni*
ABL	*due-digi-ni*	*taŋki-digi-ni*	*tauze-digi-ni*	*auze-digi-ni*

	'upstream'	'in the middle'	'over, above, on'
DAT	*solieze-du-ni*	*dulaŋki-du-ni*	*xo:n-du-ni*
LAT	*solieze-tigi-ni*	*dulaŋki-tigi-ni*	*xo:n-tigi-ni*
LOC	*solieze-le-ni*	*dulaŋki-le-ni*	*xo:-lo-ni* (*xo:n-dule-ni*)
PROL	*solieze-li-ni*	*dulaŋki-li-ni*	*xo:n-dili-ni*
ABL	*solieze-digi-ni*	*dulaŋki-digi-ni*	*xo:n-digi-ni*

10.2.1.2.2. Possessive inflection

The changeable postpositions must be inflected with possessive affixes that refer to the argument of the postposition (see 10.2.3). The possessive markers are the same as those employed in the nominal declension (Chapter 4) and may undergo the same phonological contraction with the preceding vowel. Below is the personal paradigm of the postposition *kä:-* 'near' in the Locative.

(749)

1SG	*kä:-la-i*	1PL.EX	*kä:-la-u*
		1PL.IN	*kä:-la-fi*
2SG	*kä:-la-i*	2PL	*kä:-la-u*
3SG	*kä:-la-ni*	3PL	*kä:-la-ti*
REF.SG	*kä:-la-i*	REF.PL	*kä:-la-fi*

10.2.1.3. Semantic groups

10.2.1.3.1. Spatial postpositions

Spatial postpositions are cited here in the Locative 3rd person Singular form, on their inflection see 10.2.1.2.

(750)

amä:-za-la-ni	'after'
ca:-la-ni	'behind'
aka-la-ni	'behind'
do-lo-ni	'inside; among'
agda-la-ni	'between, in the middle'
due-le-ni	'on the top of'
au-ze-le-ni	'close to, here, on this side'
dulaŋki-le-ni	'in the middle'
e:-le-ni	'on the side, close to'
ezize-le-ni	'downstream'
ge:-le-ni	'on'
kä:-la-ni	'near, next to'
ñondu-le-ni	'before, in front of'
ogdo-lo-ni	'at the side'
solie-ze-le-ni	'upstream'
tau-ze-le-ni	'behind'
taŋki-le-ni	'in the middle, in the center'
xegie-le-ni	'under, below'
xo:ndi-le-ni	'on'
zulie-le-ni	'before'
zoagda-ŋki-le-ni	'between'

we:-le-ni, wei-le-ni, ui-le-ni	'on the surface'
bagä:-za-la-ni	'across (the river), on the opposite side'

The postposition *cu-li-ni* 'along' has only the Prolative form. Examples:

(751) a. *Xeigi:*   *zeŋe-ze e:-le-ni*   *guza-ga:-ni.*
trousers.1SG   right-N side-LOC-3SG   tear-DEC.PAST-3SG
'My trousers are torn on the right side.'

      b. *Bi*   *t'a*   *we:-le-ni*   *te:-mi.*
me   fallen.tree   top-LOC-3SG   sit-1SG
'I am sitting on a fallen tree.'

      c. *Ba:*   *xegi-le-ni,*   *na:*   *ui-le-ni*   *ono*
place   under-LOC-3SG   earth   top-LOC-3SG   how
bi: *demi*   *ni:*   *bie.*
be.PRP   IND   man   be.PRP.HAB
'Under the sky on the earth there are different people.'

      d. *Ic'a-i*   *bäsa-wa*   *xo:n-dili-ni*
small-FOC   stream   top-PROL-3SG
xetigene-kce:-mi.
jump-INT.PAST-1SG
'I wanted to jump over the small stream.'

The postposition *do-lo-ni* 'inside' has a metaphorical partitive sense 'among, of', cf.:

(752) a. *Bi*   *aziga-ma*   *sita-na-i*   *do-lo-ni*
me   girl-ADJ   child-PL-1SG   inside-LAT-3SG
emus'e   *Lena*   *alagdig'a.*
alone   Lena   beautiful
'Among my daughters only Lena is beautiful.'

      b. *Men-e*   *tege*   *do-lo-ni*   *zube*   *tege-we*
REF-0   gown   inside-LOC-3SG   two   gown-ACC
xebu-zeŋe-i.
take-FUT-1SG
'I will take two of my gowns.'

10.2.1.3.2. Temporal postpositions

Temporal postpositions are based on a certain case form (the Dative, Locative or – rarely – the Prolative or Instrumental) of spatial postpositions (753a). Other temporal postpositions do not have a corresponding spatial meaning

(753b). For natural semantic reasons temporal postpositions mostly occur in the 3rd person Singular, although other personal forms are not excluded either.

(753) a. *amä:-la-ni*   'after (LOC)'
       zülie-ni, zülie-te   'before (NOM)'
       ño:n-dule-ni   'before (LOC)', cf. *ño-* 'fore-, first'
    b. *geun-di(le)-ni,*   'without, in the absence of (DAT)',
       geun-du-ni   cf. *geu* 'empty(of the house)'

Examples:

(754) a.   *nexus'e*   *geun-di-ni*
        younger.brother   empty-DAT-3SG
        'while the brother is not at home'

    b.   *Bue-ni*   *geun-dile-ni*   *eme:-mi.*
        he-3SG   empty-LOC-3SG   come.PAST-1SG
        'I came while he was out.'

    c.   *Bue-ni*   *geun-di-ni*   *etete-mi.*
        he-3SG   empty-DAT-3SG   work-1SG
        'I work without him.'

    d.   *Si*   *geun-di:*   *zuge*   *b'a-mu.*
        you   empty-DAT.2SG   trouble   get.PAST-1PL.EX
        'We had trouble in your absence.'

    e.   *gäwa zulie-le-ni*   'before the dawn'
        <dawn before-LOC-3SG>

    f.   *saŋxua amä:-la-ni*   'after lunch, in the afternoon'
        <lunch after-LOC-3SG>

    g.   *bolo-ni teun-dile-ni*   'every autumn'
        aŋa teun-di-ni   'every year'
        dogbo teun-dile-ni   'every night'
        ei ekin-di-ni   'at this time'

Some temporal postpositions take a subordinate participial clause as an argument, cf. (755a) and (755b). These are addressed at length in 21.3.1.

(755) a.   *Dogbo*   *ekin-di-ni*   *wakca-na-ini.*
        night   time-DAT-3SG hunt-DIR-3SG
        'He goes hunting at night.'

    b.   *Xojo*   *sol'o-i*   *ekin-di-ni*   *uma*
        salmon   go.upstream-PRP   time-DAT-3SG   hook
        egdi-we   *uma-ŋisi-je.*
        many-ACC   hook-V-IMP.2SG
        'Set up many hooks when the salmon go upstream.' (K 146)

10.2.1.3.3. Other postpositions

Other semantic groups are causal postpositions (756a), comparative postpositions (756b), and postpositions denoting substitution (756c).

(756) a. *die-(le)-ni*   'because of (LAT)'
            dali(-ŋke)n-di-ni   'thanks to (DAT)'
       b. *di:ŋki-ni*   'as large as, of the size of'
            xe:ŋki-ni   'nearly'
            du:(-zi)-ni   'in the shape, in the form (INST)',
                                    cf. *du:* 'shape'
       c. *o-li-ni*   'instead of (PROL)'
            olin-di-ni   'instead of (DAT)'
            olin-dile-ni   'instead of(LOC)'
            emi-ni   'instead of'

Examples:

(757) a. *säŋsaŋa olin-dile-ni*   'instead of the teacher'
            <teacher instead-LOC-3SG>
       b. *mamasa die:-ni*   'because of the wife'
            <wife because-3SG>
       c. *Omo*   *ni:*   *wa:-ni*   *die-le-ni*   *uti*
            one   man   kill.PP-3SG   because-LOC-3SG   this
            a:nta   *läsi*   *sita-wa*   *sun-du*   *b'a-zaŋa-ni.*
            woman   many   child-ACC   you-DAT   get-FUT-3SG
            'Instead (literally: because) of the man who was killed, this woman
            will give birth to many children for you.'
       d. *Ag'a*   *min-zi*   *kusige* *die-le-ni*
            brother   me-INST   knife   because-LOC-3SG
            ñaugda-masi-e-mu.
            quarrel-REC-PAST-1PL.EX
            'We had an argument with my brother because of the knife.'
       e. *Bi*   *olin-dile-i*   *xoŋto*   *ni:*   *etete-zeŋe-ni.*
            me   instead-LOC-1SG   other   man   work-FUT-3SG
            'Another man will work instead of me.'
       f. *Si*   *sita-i*   *si*   *di:ŋki*   *ede:-ni.*
            you   child-2SG   you   like.2SG   become.PAST-3SG
            'Your son became your size.'
       g. *Zaŋgä*   *ŋene-i-ni*   *olin-di-ni*   *ni:*
            chief   go-PRP-3SG   instead-DAT-3SG   who
            bi-ze?
            be-SUBJ
            'Who will be instead of the chief who left?'

The causal postpositions are compatible with the participial subordinate clause (21.1.3).

10.2.2. Unchangeable postpositions

The main formal feature of this class of postpositions is the absence of possessive suffixes. A few unchangeable postpositions assign a non-Nominative case to their argument nominal (see 10.2.3).

10.2.2.1. Derivation

A number of spatial and temporal postpositions have appeared as a result of the conversion of spatial and temporal adverbs. Quite a few spatial postpositions (see the list in (761a)) employ the adverbial Accusative marked with (')-*fA* (10.1.1). The Accusative postpositions express a general location or movement through, along or all over the space.

(758) a. *ba: x'o-fo*   'through the taiga'
         <place top-ACC>
      b. *'ana ogd'o-fo*   'near (along) the boat (if it is pulled)'
         <boat side-ACC>
      c. *xokto g'e-fe*   'along the road'
         <road surface-ACC >
      d. *Zugdi*   *g'e-fe*   *siŋe*   *egdi.*
         house   surface-ACC   rat   many
         'There are many rats all over the house.'
      e. *Zueze*   *w'e-fe*   *egdi*   *moxo*   *nede-se.*
         table   top-ACC   many   bowl   put-PP.PAS.
         'There are many bowls put all over the table.'

Temporal postpositions in (759a) have developed from "frozen" forms of the copula verb 'be'. Temporal and spatial postpositions in (759b) are lexicalized verbal forms. Postpositions in (759c) go back to various case forms augmented with the 3SG inflection -*ni*.

(759) a. *bi-si-ni*   'ago'   <be-PAST-3SG>
         bi-s'e-si   'in'   <be-PERF-PC>
         bi:-ni   'when'   <be-3SG>
         bi-mi   'ago'   <be-INF>
      b. *bagdi:-ni*   'in the beginning of' <live-3SG>
         malakta-ini   'in the end of'   <finish-3SG>

c. *agda-li-ni*   'while' (PROL)

ekin-du-ni   'when, during (DAT)'
cf. *eke* 'time'

teun-di-ni   'every (about time intervals) (DAT)'
cf. *teu* 'all'

e:lin-di-ni   'when, during (DAT)'
cf. *e:li* 'time'

agda-du-ni   'while (DAT)'
cf. *agda-la-ni* 'between'

Ssome other postpositions with a different derivational history are cited below.

(760) *cul(i)*   'right, straight, along'   *culi-ni*   'along'
       keilie   'over'   *keili-gde*   'over'
       xule-mi   'more than'   *xul'a*   'extra'
       amä:-ta   'after'   *amä:-la-ni*   'after'
       cai-xi   'further, next'   *cai-xi*   'far (LAT)'
       meŋde   'with'   *meŋde*   'totally, as a whole'

       be-ptigi   'similar'   *bede*   'like' +
                                                                -ptigi ADV

       do-ŋozi   'out from'   *do-*   'inside' +
                                                                -ŋozi ABL

10.2.2.2. Semantic groups

10.2.2.2.1. Spatial postpositions

(761) a. *am'ä-fa*   'after'
           ak'a-fa   'behind'
           agd'a-fa   'between'
           auz'e-fe   'close to, on this side'
           bagä:z'a-fa   'across (the river)'
           c'a-fa   'behind'
           d'o-fo   'inside; among'
           dulaŋki-fe   'in the middle'
           eziz'e-fe   'downstream'
           k'ä-fa   'next to'
           ogd'o-fo   'near'
           soliez'e-fe   'upstream'
           t'a-fa   'along'
           tauz'e-fe   'along the other side'
           xegie-fe   'under, below'

x'o-fo		'(all) over, on the top'
w'e-fe		'on the top, (all) over'
zulie-fe		'before'
'e-fe		'on the side of'
g'e-fe		'along, on the top, (all) over'
b.	*egelie*	'around'
	bagdi:-ni	'in the beginning'
	cul(i)	'right, straight'
	keilie	'over'
	pui	'through'
	malakta-ini	'in the end of'

Examples:

(762) a. *La:mo*   *egelie*   *soktu-te-i-ze.*
         mill   around   spread-PERM-2SG-HORT
         'Spread (it) around the mill.'

   b. *Sagdi*   *namu*   *egelie* *egelie* *tukä:-ni.*
      large   sea   around   around   run.PAST-3SG
      'He ran around the large sea.'

   c. *Joxo*   *culi*   *xuiŋ-ki-ni*   *g'ai.*
      kettle   right   dive-PAST-3SG   crow
      'The crow dived right into the kettle.'

   d. *Xasa*   *pui*   *ñ'ädiga-mu:i-ini.*
      box t   hrough   younger.son-V-3SG
      'It smells of the younger son through the box.'

   e. *Mogzo*   *'e-fe*   *solo-zo-fi.*
      short.bank   side-ACC   move.upstream-SUBJ-1PL.IN
      'We will float upstream near the short riverbank.'

   f. *uli bagdi:-ni*   'in the beginning of the river'
      xokto bagdi:-ni 'in the beginning of the road'

10.2.2.2.2. Temporal postpositions

(763)
ño:-zi	'before' (INST)
bi:-ni	'when'
dexi	'until'
bi-s'e-si	'in'
cai-xi	'further, next' (LAT)
bagdi:-ni	'in the beginning'
bi-si-ni	'ago'
malakta-ini	'in the end of'
agda-du-ni	'while' (DAT)

agda-li-ni	'while' (PROL)
ekin-du-ni	'when, during' (DAT)
edeisini	'when, during'
e:lin-di-ni	'when, during' (DAT)
t eun-di-ni	'every (about time intervals)'
bi-mi	'ago'

Examples:

(764)   a.   *A-wa*   *cai-xi*   *aja-zi*   *bagdi-zeŋe-fi.*
        that-ACC   far-LAT   good-INST   live-FUT-1PL.IN
        'Let us go on living well from this day.'

   b.   *Tuŋa-ma*   *neŋi*   *bi-s'e-si*   *xoton-tigi*
        five-ACC   day   be-PERF-PC   city-LAT
        ŋene-zeŋe-i.
        go-FUT-1SG
        'I will go to the city in five days.'

   c.   *Zu:*   *neŋi-ni*   *bi-mi*   *oño-wo*   *oño-so.*
        two   day-3SG   be-INF   write-ACC   write-PP.PAS
        'The letter was written two days ago.'

   d.   *Puile*   *bi:-ni*   *te:-gi-zeŋe-ni.*
        dawn   be-3SG   get.up-REP-FUT-3SG
        'He will get up before sunrise.'

   e.   *aŋa bagdi:-ni*   'in the beginning of (each) year'
        aŋa-ni bagdi:-ni   'in the beginning of the year'
        aŋa-ni malakta-ini   'in the end of the year'

The postposition *dexi* expresses a temporal limit; its argument may be represented by a nominal, a temporal adverb, or a participial clause (21.3.1.3), cf.:

(765)   a.   *siki-gi: dexi*   'until the evening'   <evening-REP.PRP until>
   b.   *ei dexi*   'until now'   <now until>
   c.   *saŋxua dexi*   'until noon'   <lunch until>
   d.   *bude dexi*   'until death'   <death until>

10.2.2.2.3. Comparative postpositions

(766)   *bede*   'like'
        bejeku   '(a)like, similar'
        bubu   'similar to'
        d'ofo, do: 'exactly like', cf. *d'o-fo* 'inside'

beptigi	'similar'
xulemi	'more than'

Comparative postpositional phrases bear the predicative role in copular constructions (17.2.2.2.4), express the standard of comparative in equative constructions (6.3.3), function as adjuncts (767), or as secondary predicates (768).

(767) a. A:nta-wa   xazu-we   bede   toji-zi
woman-ACC   thing-ACC   like   bride.money-INST
xuda-si-e-ti.
fur-V-PAST-3PL
'They used to sell women for bride money in the same way as things.'

    b. Xuda-si: ni: tuxi-le   ŋua-ini   mafa
fur-V.PRP   man   sledge-LOC   sleep-3SG   bear
bede   agdu   do-lo-ni.
like   hole   inside-LOC-3SG
'The merchant is sleeping on the sledge like a bear in a bear hole.'

    c. Soŋgo   sita-ni   teu   diga   kasanziga   bede.
bear   child-3SG   all   eat   puppy   like
'The bear cubs are all eating like puppies.'

(768) a. Zegde   to: bede   eme-ili.
burn   fire   like   come-3SG
'He came (as if he were) like a burning fire.'

    b. Ni:-we   ba: bui-we-ni   bede
man-ACC   place   animal-ACC-3SG   like
meisi:-ti.
think-3PL
'They think about people as about wild animals.'

    c. Ami-mi   beptigi   bagdi-e-ni.
father-REF   similar   live-PAST-3SG
'He has grown up resembling his father.'

    d. Aziga   eni-mi   do:-gbo   bagdi-gi-e-ni
girl   mother-REF   like-FOC   live-REP-PAST-3SG
uligdig'a-zi.
beautiful-INST
'The girl grew up beautiful exactly like her mother.'

    e. A:kta-wan-ta-i-ze   ku'ai-le   anči
chase-CAUS-PERM-IMP.2SG-HORT   ear-PART   no
bede.
like
'Let me pursue (them) as if they were earless.'

The postposition *d'o-fo* '(exactly) like' may sometimes take possessive affixes, cf. (769a) and (769b).

(769) a.   *krokodila   aŋma-ni   d'ofo-do*
          crocodile   mouth-3SG   like-FOC
          'like the mouth of a crocodile'

     b.   *Nua-ni   ami-mi   d'ofo-ni   bagdi-e-ni.*
          he-3SG   father-REF   like-3SG   live-PAST-3SG
          'He was born looking exactly like his father.'

10.2.2.2.4. Comitative postpositions

Generally speaking, the meaning of the comitative postpositions is 'with'.

(770) *meŋde*   '(together) with' (with inanimate nouns)
     mule   'with' (with animate nouns)
     geje   'with' (with animate nouns)
     zuŋe   'together with, both' (with animate nouns)

The postpositional phrase headed by the postposition *meŋde* 'with' most often denotes the entire object together with its parts:

(771) a.   *Nakta   ña-wa-ni   imo: meŋde*
          boar   skin-ACC-3SG   fat   with
          keli-nde-iti.
          cut-SEM-3SG
          'They cut out the boar skin together with the fat.'

     b.   *pauza   dili   je:-ni   meŋde-de*
          roe   head   horn-3SG   with-FOC
          'the roe's head together with horns'

     c.   *Tuduze   ña:-ni   meŋde   olokto:-mi.*
          potato   skin-3SG   with   cook.PAST-1SG
          'I cooked potatoes together with the skin.'

The comitative postpositions *geje, mule* and *zuŋe* differ in syntactic functions and semantics. The postposition *mule* 'with', as distinct from *geje* and *zuŋe*, presupposes a close "inalienable" association between two participants, which must constitute a "natural" pair: a husband and wife, a mother and son, cf.: *ogbö eni mule* 'elk with female'. So (772a) below can only be understood as meaning that I climbed the tree with my own (and not somebody else's) younger brother. The postposition *zuŋe* 'together with, both' goes back to the Collective numeral 'both' (11.1.3) and always takes a Singular object. As

distinct from *mule*, it does not presuppose inalienable possession between two animate entities. The postpositional phrase with the postpositions *mule* or *zuŋe* has four syntactic functions. First, it can correspond to a postpositional modifier (such cases are addressed in 13.5.1). Second, it may be used as a predicate in copular constructions (17.2.2.2.4). Third, it encodes the counteragent participant in the context of formally or semantically reciprocal verbs (16.1.5.2, 16.2.3.1). Finally, it may function as the comitative adjunct, cf.:

(772) a. *Bi*   *neŋu*   *mule*   *mo:-tigi*
       me   younger.sibling   with   tree-LAT
       tukti-e-mi.
       climb-PAST-1SG
       'I climbed the tree with my younger brother.'

    b. *Bi* *anda* *mule* *ŋene:-mi.*
       me friend with go.PAST-1SG
       'I left with my friend.'

    c. *Si*   *zäla*   *mule*   *xoton-tigi*   *xuli-se:-i?*
       you   cousin   with   city-LAT   go-EXP.PAST-2SG
       'Is it with your cousin that you went to the city?'

    d. *Bi* *xa:*   *mule* *bagdi-mi.*
       me sibling with live-1SG
       'I live with my siblings.'

    e. *Bi* *Sergei* *zuŋe* *ali-de*   *omo* *'ana-zi*
       me Sergei with when-IND   one   boat-INST
       e-zeŋe-i   *ŋene.*
       NEG-FUT-1SG   go
       I will never go in one boat with Sergei.'

The comitative postposition *geje* '(together) with' assigns the Instrumental case to its argument, which may be in Plural (see 10.2.3). It is not to be confused with the homonymous adverb *geje* 'together' illustrated below.

(773) a. *Minti*   *geje*   *zikte-we*   *teini-ze-fi.*
       we   together   blueberry-ACC   collect-SUBJ-1PL.IN
       'We will collect blueberries together.'

    b. *Minti*   *geje*   *etete-fi.*
       we   together   work-1PL.IN
       'We work together.'

    c. *Bula*   *mo:-ni*   *xulu*   *mo:-ni*
       poplar   tree-3SG   ash.tree   tree-3SG
       geje   *bagdi:-ti.*
       together   live-3PL
       'The poplar and the ash trees grow together.'

The postpositional phrase with *geje* functions as a modifier (13.5.1) or in copular constructions (17.2.2.2.4).

10.2.3. General properties of the postpositional phrase

Postpositional phrases express different adverbial meanings, mostly as clausal adjuncts but sometimes also as locational arguments (see Chapter 14). Some postpositions function as predicates in copular constructions (17.2.2.2.4), as a secondary predicate (10.2.2.2.3), or as a nominal modifier (13.5).

Postpositions do not take more than one argument. The argument immediately precedes a postposition and cannot be separated from it under any conditions. However, in coordinated structures postposition can be stranded, cf.:

(774) *Mo:*   *bi*   *zugdi:*   *škola-u*   *zule:-ni*
       tree   me   house.1SG   school-1PL.EX before-3SG
       bagdi-e-ni.
       live-PAST-3SG
       'Trees grew before my house and before our school.'

In the "modifier raising" constructions (24.2.1.1) the postposition immediately follows the modifier of the noun phrase that corresponds to its argument, cf. (775a) and (775b) with the same translation:

(775) a. *Bi*   *guzakta-xi*   *ni:*   *kä:-du-ni*
           me   beard-ADJ   man   near-DAT-3SG
           tei-mi.
           sit-1SG
       b. *Bi*   *ni:*   *guzakta-xi*   *kä:-du-ni*   *tei-mi.*
           me   man   beard-ADJ   near-DAT-3SG   sit-1SG
           'I am sitting near a bearded man.'

The majority of postpositions take the Nominative argument, either a noun or a pro-noun. The pronominal argument may be omitted. Temporal postpositions are compatible with temporal adverbs (10.1.7.1). The argument is obligatorily cross-referenced by the possessive marker on the so-called changeable postposition (776). Unchangeable postpositions do not mark their argument morphologically, the syntactic relationship between them and their argument is a mere juxtaposition (777).

(776) a. *minti amä:ta-fi*
           <we behind-1PL.IN>
           'behind (after) us'

b. *bi abuga-i solieze-du-ni*
<me father-1SG upstream-DAT-3SG>
'higher up the stream than my father'

c. *aziga-ziga kä:-la-ti*
<girl-PL side-LOC-3PL>
'near the girls'

d. *Sagdi namu kä:-li-ni tukä:-ni.*
large sea hore-PROL-3SG run.PAST-3SG
'He ran along the large sea shore.'

(777) a. *zua dexi*   'until summer' <summer until>
      b. *mo: bede*   'like a tree'   <tree like>
      c. *bi bede*   'like me'   <me like>

Number agreement between the postposition and its argument basically follows the same rules as agreement between the elements of the possessive noun phrase (13.1).

There is a small group of postpositions that govern cases other than the Nominative. The choice of case is not determined by the verb.

(778) *geje*   'with'   INST
      amä:ta   'behind, after'   ACC
      asap-tigi 'towards'   ACC
      beptigi   'similar'   ACC
      taf(u)   'through'   ACC
      meŋde   'with'   INST

Examples:

(779) a. *Nina*   *min-zi*   *geje*   *Bali-tigi*
          Nina   me-INST   together   Khabarovsk-LAT
          ŋene-ini.
          go-3SG
          'Nina is going with me to Khabarovsk.'

      b. *Bi abuga-zi:*   *geje*   *eme:-ni.*
          me father-INST.1SG   together   come.PAST-3SG
          'He came together with my father.'

      c. *Ei aziga sin-zi*   *geje*   *te:-ni*
          this girl you-INST   together   sit.PAST-3S
          kuluba-du?
          club-DAT
          'Is this the girl who was sitting with you in the club?'

d. *ŋamakta*   *tege-we*   *taf*   *ikteme-li:-ni.*
   mosquito   gown-ACC   through   bite-INC-3SG
   'Mosquitoes bite through the gown.'

e. *min-e-we asaptigi*   'towards me'   <me-0-ACC towards >
   Nina-wa asaptigi   'towards Nina'   <Nina-ACC towards>

For the postposition *meŋde* 'with' the Instrumental marking of the object is optional, cf. the following example with (771) above.

(780) *Ise-si:-ti*   *Sendule*   *ami-ni*   *čawa-zi*
       see-IM-3PL   Sendule   father-2SG   army-INST
       meŋde   *agda*   *gune.*
       with   moor   EV
       'They see that the father Sendule is mooring together with his army.' (SKX 270)

Postpositions can only be modified by focus particles (Chapter 12).

Chapter 11
Numerals and quantifiers

Numerals and other quantifiers modify a nominal within a quantified noun phrase (13.3). On the headless quantified noun phrase see 22.2.3, on quantifier raising see 24.2.2.1.2, and on quantifier float see 24.2.1.2.2. On quantifiers in the predicative role see 17.2.2.1.2.

11.1. Numerals

Udihe uses decimal numeration. The formation of numerals is fairly regular, and can be described in terms of addition and multiplication. Russian numerals, especially those that denote large numbers, can easily be integrated into Udihe speech and are gradually replacing native numerals.

The following groups of numerals will be considered: Cardinal numerals (11.1.1), Ordinal numerals (11.1.2), Collective numerals (11.1.3), Multiplicative numerals (11.1.4), Distributive numerals (11.1.5), Approximate numerals (11.1.6), and Restrictive numerals (11.1.7).

11.1.1. Cardinal numerals

There is only one series of numeral stems used for counting different kinds of objects.

11.1.1.1. Derivation

11.1.1.1.1. Simple cardinal numerals

(781)

1	*omo*		6	*ñuŋu*
2	*zu:, zube*		7	*nada*
3	*ila*		8	*zakpu*
4	*di:*		9	*jei, jeji*
5	*tuŋa*		10	*za:*
20	*wei, weji* ← *waji* (Schneider 1936: 111)			
100	*taŋgu*			
1000	*miŋga*			

The Cardinals from 11 to 19 and from 30 to 90 are compound and based on a decimal system (see 11.1.1.2). Native non-derived numerals above 1000 are missing, Russian borrowings are used instead, for example, *miliona* 'million', *miliarda* 'thousand million'.

For numeral 2, the Nominative form *zu:* 'two' (adduced in Schneider 1936: 10) is more typical of the Northern dialect, whereas *zube* is characteristic of the Southern dialect, although *zu:* is also an option. *Zu-be* is the 'frozen' Accusative form of *zu:*, which suggests that the stem *zu:* historically belonged to the *l*-final stems (see 4.1.1.3). Cf. the following examples from the Southern dialect:

(782) a. *Min-du*   *zube*   *ugda*   *bie.*
          me-DAT   two   boat   be.PRES.HAB
          'I have two boats.'

     b. *Ei* *zube* *b'ata* *omo* *aŋa-ni*   *bagdi-e-ti.*
          this two   boy   one   year-3SG   live-PAST-3PL
          'These two boys were born the same year.'

     c. *Bi* *ise:-i*   *zu:* *in'ei-we* *xokto-lo.*
          me   see.PAST-2SG   two   dog-ACC   road-LOC
          'I saw two dogs on the road.'

The numeral *omo* 'one' may be used sporadically as an indefinite article (13.4) or with the meaning 'only'.

(783) *Tada-ni*   *omo*   *xunepte*   *osi-gi-e-ni.*
       arrow-3SG   one   ashes   remain-REP-PAST-3SG
       'Only ashes remained from his arrow.' (SKX 96)

11.1.1.1.2. Compound numerals

Numerals from 11 to 19 are formed as compounds with 10, whereas the operation of addition is morphologically unmarked. Each element of the compounds preserves its original phonological stress.

(784) *za:-omo*   11 (10 + 1)
       za:-zube   12 (10 + 2)
       za:-ila   13 (10 + 3)

Numerals that denote tens, with the exception of *wei/weji* '20', are based on multiplication by ten. This operation is also morphologically unmarked, but the order of stems is reversed: the stem *za:* '10' takes the final position. It does not bear a separate stress in this case and is phonologically reduced to *za*, so the

derivation of tens can be classified as a suffixation of an element *-za* 'ten' rather than a compounding.

(785)   *ila-za*   30 (3 x 10)   *nada-za*   70 (7 x 10)

        di:-za   40 (4 x 10)   *zakpu-za*   80 (8 x 10)

        tuŋa-za   50 (5 x 10)   *jeji-za*   90 (9 x 10)

        ñuŋu-za   60 (6 x 10)

Hundreds and thousands are also based on multiplication.

(786)   *omo taŋgu*   100 (1 x 100)

        ila taŋgu   300 (1 x 100)

        zu:(be) miŋga   2000 (2 x 1000)

Other compound numerals are formed by the mere juxtaposition of words denoting tens, hundreds, and thousands, and the numerals from 'one' to 'nine', cf.:

(787)   *wei tuŋa*   25 (20 + 5)

        ila-za omo   31 (30 + 1)

        omo taŋgu tuŋa-za nada   157 (100 + 5 x 10 + 7)

11.1.1.1.3. Fractions

The use of fractions is very limited. Native means of denoting fractions are missing with the exception of the words *kakt'a* 'half' (divided in length, also in the abstract meaning), *kaŋdugu* 'half' (divided in width), *drug'afa* 'half' (often in the abstract meaning, also as the adverb 'in two'). They may occur in the postnominal position (in a "raised modifier" construction), cf. (788a) and (788b). However, more typically they function as prenominal quantifiers, cf. (788c), (788d), and (788e). The meaning 'one quarter' may be expressed as 'half of the half', as in (788f), or periphrastically as 'divide in two twice', as in (788g).

(788) a.   *zube časa kakt'an-du-ni*   'at half past one'

             <two hour half-DAT-3SG>

      b.   *Omo*   *ogbö*   *ña:-ni*   *kakt'a-zi-ni*   *omo*

          one   elk   skin-3SG   half-INST-3SG   one

          gagda-wa *wo:-ni.*

          other-ACC   make.PAST-3SG

          'He made one (boot) from half an elk's skin.'

c. *Ei   banza-la   drug'afa   'ai   bie.*
this bottle-LOC   half   vodka be.PRES.HAB
'There is half of the vodka in this bottle.'

d. *Drug'afa   tue-ni   tukti-e-ni.*
half   pole-3SG   climb-PAST-3SG
'He climbed till half of the pole.'

e. *kakt'a da:*   'half a fathom'
kakt'a bä: 'half a month'

f. *Kandugu   drug'afa   xali-e min-du.*
half   half   pour-IMP.2SG me-DAT
'Pour me quarter (of it).'

g. *Kandugu   kandu-li-ge-si   bu-o:-ni.*
half   half-V-PERF-PC.SS   give-PAST-3SG
'He gave one quarter.'

The meaning '(divide) into several equal parts' may be rendered by the combination of the corresponding Collective numeral (11.1.3) with the denumeral adjective *omo-ti* 'same, similar', cf.:

(789) *zuŋe (tie) omo-ti*   'into two equal parts'
<both pair one-ADJ>
ilan-tuŋa omo-ti   'into three equal parts'
<three-COL one-ADJ>

Otherwise, Russian fractional expressions are used: *tret'* 'one third', *četvert'* 'one quarter', etc.

11.1.1.2. Inflection

The bare Cardinal numeral forms are used in the attributive (13.3) and predicative (17.2.2.1.2) function. Besides, like most other modifiers, the Cardinals may be used independently in an argument position (22.3.2). In the latter case they take case inflections, cf. (790a) and (790b):

(790) a. *Zakpu-ma   b'a-gi-e-ni.*
eight-ACC   find-REP-PAST-3SG
'He has found eight (badgers).' (K 150)

b. *Ono   ja:-i   zube   tiu-zi*
how   PROV.PAST-2SG   two   stick-INST
eme-gi:?
come-REP.2SG
'What has happened that you are coming back with two sticks?'
(K 169)

An exception is the postnominal numeral within the Accusative noun phrase, which demonstrates obligatory attributive agreement in case (13.3.4).

The numerals *taŋgu* '100' and *miŋga* '1000' have vowel-final stems. Numerals from 'one' to 'ten' with the exception of *zu:(be)* 'two' and *wei/weji* 'twenty' have *n*-final stems and follow the declension regularities of class II nouns (4.1.1). The numeral *zu:* 'two' (typical of the Northern dialect) behaves like an old noun with an *l*-stem, that is, it takes the Accusative suffix *-be* (cf. 4.1.1.2.1). In the Southern dialects the secondary Accusative in *-me* has developed, cf. the form *zu-be-me* with two Accusative markers, the old suffix *-be* typical for *l*-type stems, and the "new" *-me* typical for *n*-type stems. "Double" Accusative has been also attested in *tuŋa-ma-wa* <five-ACC-ACC>. Other oblique cases are derived from the vowel-final stem *zu:*.

Table 13. Declension of the Cardinal numerals

	1	2	3	4	5
NOM	omo	zu:, zu(be)	ila	di:	tuŋa
ACC	omo-mo	zube(-me)	ila-ma	di:-me	tuŋa-ma
DAT	omon-du	zu:-du	ilan-du	di:n-du	tuŋan-du
LAT	omon-tigi	zu:-tigi	ilan-tigi	di:n-tigi	tuŋan-tigi
LOC	omon-dile	zu:-dile	ilan-dile	di:n-dile	tuŋan-dile
PROL	omon-dili	zu:-dili	ilan-dili	di:n-dili	tuŋan-dili
ABL	omon-digi	zu:-digi	ilan-digi	di:n-digi	tuŋan-digi
INST	omon-zi	zu:-zi	ilan-zi	di:n-zi	tuŋan-zi

	6	7	8	9	10
NOM	ñuŋu	nada	zakpu	jei, jeji	za:
ACC	ñuŋu-me	nada-ma	zakpu-ma	jeji-me	za:-ma
DAT	ñuŋun-du	nadan-du	zakpun-du	jejin-du	za:n-du
LAT	ñuŋun-tigi	nadan-tigi	zakpun-tigi	jejin-tigi	za:n-tigi
LOC	ñuŋun-dile	nadan-dile	zakpun-dile	jejin-dile	za:n-dila
PROL	ñuŋun-dili	nadan-dili	zakpun-dili	jejin-dili	za:n-dili
ABL	ñuŋun-digi	nadan-digi	zakpun-digi	jejin-digi	za:n-digi
INST	ñuŋun-zi	nadan-zi	zakpun-zi	jejin-zi	za:n-zi

	20	100	1000
NOM	wei, weji	taŋgu	miŋga
ACC	weji-me	taŋgu-we	miŋga-we
DAT	wejin-du	taŋgu-du	miŋga-du
LAT	wejin-tigi	taŋgu-tigi	miŋga-tigi
LOC	wejin-dile	taŋgu-le	miŋga-la
PROL	wejin-dili	taŋgu-li	miŋga-li
ABL	wejin-digi	taŋgu-digi	miŋga-digi
INST	wejin-zi	taŋgu-zi	miŋga-zi

In the compound numerals only the last component is inflected. The numerals denoting tens have vowel-final stems, cf. (791a).

(791) a. *ila-za-wa* '30 (ACC)'
           di:-ze-le '40 (LOC)'
           nada-za-du '70 (DAT)'
      b. *omo miŋga jeji taŋgu ila-za di:n-tigi*   '1934 (LAT)'
           (Schneider 1936: 113)
           nada-za zakpun-du   '78 (DAT)'
           omo miŋga jeji taŋgu ñuŋu-ze di:n-du   '1964 (DAT)'
           (Sunik 1968: 219)

In certain contexts Cardinal numerals may take possessive affixes which typically express definiteness, cf.:

(792) a. *Ila-ni*   *sin-e-we*   *igisi-mi*   *mute-ze.*
           three-3SG   you-0-ACC   feed-INF   can-SUBJ
           'Three of them will be able to bring you up.' (SK 350)
      b. *Gä:wa-na-i-du-ni*   *guliŋ-ki-ti*   *ilah-ni,*
           dawn-V-PRP-DAT-3SG   leave-PAST-3PL   three-3SG
           jegdige,   *Zagi*   *Jagini,*   *Guas'a Zagilani.*
           hero   Zagi   Jagini   Guasa Zagilani
           'At the dawn three of them left: the hero, Zagi Jagini, and Guasa Zagilani.' (SKX 214)

11.1.2. Ordinal numerals

11.1.2.1. Derivation

The numerals 'one' and 'two' have suppletive ordinal stems.

(793) *omo*   'one'   *ñoxo*   'first' (literally 'foremost')
      zu:(be) 'two'   *gagda(-ni/-ti)* 'second' (literally 'other')

On the pronominal determiner *gagda* see also 9.7.2; example (794) demonstrates its use as an Ordinal numeral.

(794) *Bi*   *tatusi-mi*   *gagda klasa-du.*
      me   learn-1SG   second class-DAT
      'I go to the second class.'

The Ordinals beginning with 'three' are formed with the affix *-eti/-äti/-iti* (Northern dialect) or *-nti/-intiti/-iti/-eti* (Southern dialect).

(795)

	Northern	Southern
'third'	*ile-äti*	*ile-nti*
'fourth'	*di:-eti*	*di:-nti*
'fifth'	*tuŋ-äti*	*tuŋa-nti*
'sixth'	*ñuŋu-eti*	*ñuŋu-iti*
'seventh'	*nad(a)-ä:ti*	*nada-inti(ti)*
'eighth'	*zakpu-eti*	*zakpu-iti*
'ninth'	*jeji-eti*	*jeji-eti*
'tenth'	*za:-eti*	*za:-eti*
'eleventh'	*za:-omo-iti*	*za-omo-iti*
'twelfth'	*za:-zu-eti*	*za:-zu-eti*

11.1.2.2. Inflection

Like other modifiers, Ordinals are mostly used in a bare form in the attributive position (796). On their attributive agreement see 13.3.5. When used independently within a headless noun phrase (22.3.2) Ordinals inflect for case (797).

(796) a. *Nua-ni*   *ilie-nti*   *zugdi-du*   *bagdi:-ni.*
he-3SG   three-ORD   house-DAT   live-3SG
'He lives in a third house.'

b. *Nad-ä:ti*   *namu-le*   *jin-e-isi-ni*   *käi*
seven-ORD sea-LAT   come-0-PC-3SG   hill
xo:n-dile-ni   *bie*   *gunei*
top-LOC-3SG   be.PRES.HAB   EV
zugdi-ti.
house-3PL
'When he came to the seventh sea he saw their house on the hill.'
(K 181)

(797) a. *Zawa-gi-mi*   *ed'e*   *ña*   *ti:*   *omo-tigi*
take-REP-INF   become.PERF again that one-LAT
ile-äti-ni   *wende:-ni.*
three-ORD-3SG   throw.PAST-3SG
'He took (the knife) again, and threw it into a second (girl), and then a third.' (K 184))

b. *Ña*   *uti*   *die-ti*   *ña*   *utebe*
again   that   four-ORD   again   so
dian-a-li-ge.
speak-0-INC-PERF
'One more, the fourth (gull) began to speak like this.' (K 187)

It should be noticed, however, that to some extent the Cardinal numeral has taken over the functions of the Ordinal numeral in its attributive use, cf.:

(798)   *Tuŋa   bä-du   egdi   käfa.*
        five   month   many   tick
        'There are a lot of ticks in the fifth month (in May).'

The Ordinal numerals inflect for case like regular vowel-final nouns (799a). However, certain cases are attested when the case affix is inserted between the stem and the Ordinal marker *-ti* (799b). This fact indirectly shows that the component *-ti* within the Ordinal numeral suffix may ultimately go back to the 3rd person Plural possessive marker.

(799)   a.   *di:-nti-tigi*   'to the fourth'   <four-ORD-LAT>
             ile-nti-we   'the third'   <three-ORD-ACC>
        b.   *tuŋa-wa-ti*   'the fifth'   <five-ACC-ORD>
             nadä-ma-ti   'the seventh' (SK 318)   <seven-ACC-ORD>
             ilä-tigi-ti   'the third'   <three-LAT-3PL>
                              (Schneider 1936: 111)

Ordinals are compatible with a personal inflection. Independently used Ordinals in the 3rd person Instrumental form have a repetitive meaning.

(800)   a.   *ili-enti-zi-ni*   'third time'   <three-ORD-INST-3SG>
             gagdan-ti-zi-ni   'second time'   <second-ORD-INST-3SG>
        b.   *Emne*   *paktina-si-e-ni,*   *gagdan-zi-ni*
             once   hit-IM-PAST-3SG   second-INST-3SG
             ili-enti-zi-ni.
             three-INST-3SG
             'He hit once, (then) a second time, (then) a third time.'

11.1.3. Collective numerals and quantifiers

Numerals as well as the universal quantifier *teu* (11.2.2.1) have a Collective form that is associated only with animate (human) participants. Collective numerals occur in the attributive position or – more often – as an independent quantifier. Collective numerals for counting inanimate objects are lacking.

11.1.3.1. Formation

Collective numerals from 'three' to 'ten' have two regular forms: the attributive form and the independent form. The independent form is derived

with the suffix *-niŋa* (*-ŋAhA* in the Northern dialect), while the attributive form is derived with the suffix *-tuŋa*, cf.:

(801) independent form   attributive form
   ila-niŋa   *ilan-tuŋa* 'all three'
   di:-niŋa   *di:n-tuŋa* 'all four'

Numerals above 'ten' do not seem to have Collective forms. Obviously, the numeral *omo* 'one' also lacks such a form. The independent Collective form of the numeral *zu:(be)* 'two' is *zuŋe* 'both'; the form *zu:-niŋa* is recorded but obsolescent; there is no special attributive form for this numeral.

The Collective suffix *-niŋa* is also employed in several quantificational words with a collective meaning (802) and is likely to be etymologically equivalent to the Comitative verbal suffix (8.2.1.4).

(802) *xufa-niŋa* 'all together' cf. *xufa-lanzi, xufa* 'group'
   teu-niŋa   'all'   *teu*   'all'

11.1.3.2. Inflection

The attributive Collective form is used in preposition to the head nominal and remains uninflected, cf.:

(803) *Abuga-i*   *ilan-tuŋa* *sita-na-du-i*   *mäunda-wa*
   father-1SG thee-COL child-PL-DAT-REF gun-ACC
   bu-o:-ni.
   give-PAST-3SG
   'The father gave one gun (for the use of) all three of his sons.'

Independent Collective numerals inflect for case as regular vowel-final nouns, but have the adverbial Accusative in '*-fe* (cf. 10.1.1) together with the nominal Accusative in *-wA*, cf. (806a) and (804c).

(804) a. *Nada-niŋa-tigi* *tu:* *mogoliei* *xetige-si-e-ni.*
     seven-COL-LAT all around jump-IM-PAST-3SG
     '(She) jumped on each of the seven (beds).' (K 182)
   b. *U:na-u-ze*   *su* *bi* *aka-la-i*
     bring-CAUS-SUBJ you me back-LOC-REF
     to:to   *teu-me-n(i)-de*   *nada-niŋa-wa.*
     on.back all-ACC-3SG-FOC seven-COL-ACC
     'I'll take all of you on my back (over the sea), all seven.' (K 185)

c. *Zuŋe*   *eme-i,*   *zawa-i*   *nexu-mi.*
   both   come-PRP   take-PRP   younger.sibling-REF
   'They both came and brought their younger sister.'

d. *Säta*   *saki-nde-zeŋe-i*   *uti*   *zuŋe-we*
   strong   clap-SEM-FUT-1SG   that   both-ACC
   aŋi   *belie-we.*
   IND   fairy
   'I will clap strongly both these fairies.'

The Collective form *zuŋe* 'both' is compatible with Plural possessive affixes with the meaning 'both of us', 'both of you', 'both of them', see (806). In (806c) it has an attributive function.

(805) *Nua-ni*   *ketu*   *aja*   *wakca-ini*   *minti*   *zuŋe-digi.*
      he-3SG   very   well   hunt-3SG   we.IN   both-ABL
      'He hunts better than both of us (put together).'

(806) a. *Zuŋ'e-fe-ti*   *wa:-ni*   *eni-m(i)*
      both-ACC-3PL   kill.PAST-3SG   mother-REF
      ami-m(i)-de.
      father-REF-FOC
      'He killed both his father and mother.' (K 200)

     b. *Zuŋe-ti*   *tu:*   *wa:-ni.*
      both-3PL   all   kill.PAST-3SG
      'He killed both of them.'

     c. *Geule*   *mamasa-ni*   *zuŋe-ti*   *sita-wa*
      Geule   wife-3SG   both-3SG   child-ACC
      zaba-i   *diga-waŋ-ki-ni.*
      breasts-REF   eat-CAUS-PAST-3SG
      'Geule's wife breast-fed both children.' (SKX 242)

11.1.3.3. Collective form of the universal quantifier

The Collective form of the universal quantifier *teu-niŋa* and the quantificational adverb *xufa-niŋa* correspond to the meaning 'we all (together)', 'you all (together)', or 'they all (together)'; their exact interpretation can be retrieved from the context and the verb agreement. They mostly function as an independent subject (807), while *teu-niŋa* may also be used as a prepositional modifier within the subject noun phrase (808).

(807) a. *Teu-niŋa*   *ba:-la*   *etete-u.*
      all-COL   place-LOC   work-1PL.EX
      'We all work outside.'

b. *ñeŋu*   *teu-niŋa*   *geje*   *buni:-ti.*
wolf   all-COL   together   howl-3PL
'Wolves all howl together.'

c. *Xufa-niŋa*   *eme-kte:-ti.*
group-COL   come-DIS.PAST-3PL
'They all came together.'

d. *Teu-niŋa*   *dian-a-niŋa-si-li-e-ti.*
all-COL   say-0-COM-IM-INC-PAST-3PL
'They all started talking.'

(808)   *Teu-niŋa*   *aziga*   *jexe-we*   *ča:la-iti.*
all-COL   girl   singing-ACC   like-3PL
'All girls like singing.'

11.1.3.4. Functions of the quantifier *zuŋe* 'two, both'

The Collective numeral *zuŋe* 'two, both' is used as an independent subject quantifier typically in morphological or syntactic reciprocal constructions (16.1.6) as well as with inherently reciprocal verbs (16.2.3). In this role it is compatible with personal pronouns in the Plural (*su zuŋe* 'you two').

Furthermore, the quantifier *zuŋe* 'both' may have a subject-coordinative function. On subject coordination in the context of naturally reciprocal verbs see 16.2.3. The examples in (809) present instances of subject coordination in non-reciprocal constructions.

(809) a. *Bi*   *nua-ni*   *zuŋe*   *ŋene:-mu.*
me   he-3SG   both   go.PAST-3PL
'He and I both left together.'

b. *Abuga*   *sita*   *zuŋe*   *ŋene:-ti.*
father   son   both   go.PAST-3PL
'The father and the son left.'

c. *Bi*   *od'o*   *zuŋe*   *ugda-zi*   *eine-u.*
me   grandfather   both   boat-INST   float-1PL.EX
'I and my grandfather go on a boat.'

d. *Ni:*   *n'aula*   *zuŋe*   *mo:-wo*   *le-iti.*
man   boy   both   tree-ACC   saw-3PL
'A man and a boy are sawing a tree.'

11.1.4. Multiplicative numerals

Multiplicative numerals are formed by means of the suffix *-lie/-lä:* immediately attached to the numeral stem.

(810)   *zu-lie, zu-lä:, zö:*   'twice'
        ila-lie, ila-lä: 'three times'
        di:-lie, di:-lä: 'four times'

The Multiplicative suffix is not compatible with the numeral *omo* 'one'; the corresponding meaning 'once' is rendered by the adverb *emne,* cf., however, *emn'e-lihe* in the Northern dialect (Sunik 1968: 219). For numerals above 'ten' the Multiplicative forms are in principle available, but in practice they occur very rarely.

Multiplicative numerals function adverbially, and lack a case and personal inflection, cf.:

(811)   a.   *Nada-lä*   *keku-nde:-ni.*
             seven-MULT   cockoo-SEM.PAST-3SG
             '(It) cried 'cuckoo' seven times.' (K 196)

        b.   *Aziga*   *omo*   *neŋi-ni*   *zube-lie*
             girl   one   day-3SG   two-MULT
             kala-gi:.
             change-REP.PRP
             'The girl changes (clothes) twice a day.'

        c.   *Ei*   *we:-tigi*   *wei-lie*   *tukti-wasi-e-mi.*
             this   mountain   twenty-LAT   climb-DIV-PAST-1SG
             'I have climbed this mountain twenty times.'

The number of times can also be rendered by means of the word *muda* 'time, occasion'.

(812)   *Nua-ni*   *ila*   *muda*   *xuli-s'e.*
        he-3SG   three   time   go-EXP.PERF
        'He has traveled three times.'

In the Northern dialect the multiplicative meaning may be expressed with the suffix *-mdA ~ -mdu, -mugda,* cf. *ila-mda* 'three times', *di:-mde* 'four times', but also *zu:-mde dogbo-ni* 'two nights' (SK 359), *adi-mugda* 'several times' (SKX 148), and *gagda-mdu* 'the second time' (SK 283).

11.1.5. Distributive numerals

11.1.5.1. Formation

There are two formal types of Distributive numerals that do not show any apparent semantic distinction. The first type is formed by a reduplication of the

corresponding Cardinal numerals. The second type is derived from the Cardinal numeral stems with the suffix -*tA*, cf.:

(813) *omo-omo*   *omo-to*   'one each; singly'
      zube-zube   *zu:-te*   'two each; in pairs'
      ila-ila   *ila-ta*   'three each; in threes'

Distributive numerals above 'ten' are infrequent in speech and are rapidly being replaced by the corresponding Russian construction with the preposition *po* 'each, in'.

11.1.5.2. Inflection

In the attributive function the Distributive numerals are uninflected.

(814) a. *Zube-zube*   *kusige-we*   *bu-o:-ni.*
          two-two   knife-ACC   give-PAST-3SG
          'He gave two knives (to each of them).'
      b. *Ila-ila*   *cä:za-wa*   *obolo:-ni.*
          three-three   money-ACC   divide.PAST-3SG
          'He distributed the money three rubles to each.'

Used independently the reduplicated Distributive numerals take a case inflection so that both components inflect for case in a regular way (815), while derived Distributive numerals remain uninflected (816).

(815) a. *Omon-zi-omon-zi*   *obolo-iti.*
          one-INST-one-INST   divide-3PL
          'They divided (it) one each.'
      b. *zube-me-zube-me*
          two-ACC-two-ACC
          'by two (each)'
      c. *G'ai-ziga*   *susa-kta:-ti*   *min-zi*
          crow-PL   escape-DIS.PAST-3PL   me-INST
          zun-zi-zun-zi.
          two-INST-two-INST
          'The crows escaped from me in pairs.'
      d. *Di:-zi-di:-zi*   *nede:-ni.*
          four-INST-four-INST   put.PAST-3SG
          'He put (it) in groups of four.'

(816) *Zu:-te*   *obolo-iti.*
      two-DIST   divide-3PL
      'They divide (it) into two for each.'

The Instrumental form of the Distributive 'one' *omon-zi-omon-zi* is adverbialized with the meaning 'one by one, one after another'.

(817) *Omon-zi-omon-zi*   *teu*   *wo-si-e-ni.*
      one-INST-one-INST   all   make-IM-PAST-3SG
      'She made everything, one thing after another.' (K 191)

11.1.6. Approximate numeral *tume*

The numeral *tume* has an approximate meaning 'ten hundred, thousand, very many'. Its more precise semantic interpretation depends on the context. Cf. Russian *t'ma* 'ten thousand', figuratively 'a lot, multitude' (borrowed from Turkic *tuman*).

In Schneider's materials from Anyui (Schneider 1937: 80) an approximate is rendered by the suffix *-mbA*, cf.: *za:-mba 'ana* 'approximately ten boats.'

11.1.7. Restrictive numerals

Restrictive numerals are derived with the suffix *-t'A* or *-s'A* (for the numeral 'one'), cf.:

(818) *omo-s'o, omo-t'o*   'only one'
      zube-t'e   'only two'
      ila-t'a   'only three'

Restrictive numerals for numbers higher than 'ten' are available, but are very infrequent.

According to Schneider (1936: 111) and Sunik (1968: 220), in the case declension of the Restrictive numerals the Restrictive suffix follows the case inflection: *ilan-tigi-t'e* 'only to three (LAT)' <three-LAT-REST>. In our material the Restrictive numerals appear to be uninflectable, both in the independent function (819) and in the attributive function (820).

(819) a. *Eitene*   *ña*   *tiŋmele-isi-ni*   *zube-te*
          now   again   fall-PC-3SG   two-REST
          ogi-e-ni.
          remain-PAST-3SG
          'Now when one more (gull) fell down, only two were left.' (K 187)

b. *Uti* *omo-s'o* *omo* *ogi-e-ma-ni*
 this one-REST one remain-PP-ACC-3SG
 diana-ini *jegdige.*
 say-0-3SG hero
 'The hero spoke to the single (gull) that was left.' (K 188)

(820) a. *Min-dule* *omo-t'o* *in'ei* *bie.*
   me-LOC one-REST dog be.PRES.HAB
   'I have only one dog.'

  b. *O-lo*   *wei-t'e* *zugdi* *esi-gi-e-ni.*
   this-LOC twenty-REST house remain-REP-PAST-3SG
   'Only twenty houses are left here.'

  c. *Omo-s'o* *tukca-wa* *zawa:-ni.*
   one-REST hare-ACC take.PAST-3SG
   'He caught only one hare.'

  d. *Min-du* *omo-t'o* *tieze-we* *bu-o:-ni.*
   me-DAT one-REST ruble-ACC give-PAST-3SG
   'He gave me only one ruble.'

11.1.8. Augmentative numerals

Augmentative numerals are antonymous to the Restrictive numerals and express the opposite qualificative evaluation of the quantity denoted by the numeral stem ('only, as few as' vs. 'as many as'). They are formed by means of the suffix *-ndimali.*

(821) *zube-ndimali* '(as many as) two'
  ila-ndimali   '(as many as) three'
  tuŋa-ndimali '(as many as) five'

The Augmentative suffix *-ndimali* is not compatible with the numeral *omo* 'one'.

The Augmentative numerals are fairly infrequent in speech and lack inflection, cf.:

(822) a. *Uti* *min-e-we*   *ŋele-wesi:-ti,*
   that me-0-ACC   get.frightened-DIV-3PL
   uti *getu,* *nada-ndimali* *uti.*
   that PL seven-AUGM that
   'They frightened me, all seven of them.' (K 182)

b. *Ise-si:-ni*   *i:-le*   *bie-de*
   see-IM-3SG   what-LOC   be.PRES.HAB-FOC
   nada-ndimali   *beliente*   *tene*   *gune.*
   seven-AUGM   fairy   CONT   EV
   'He sees: where all seven (gulls) were there (now) are fairies.'
   (K 184)

11.2. Quantifiers

In this section we characterize the scalar quantifiers (9.7.1) and the universal quantifiers (9.7.2) with respect to their meaning and basic functions. Quantifiers are morphologically and syntactically similar to adjectives, but differ from them in a number of properties.

11.2.1. Scalar quantifiers

The following are the most important scalar quantifiers in Udihe:

(823) *egdi*   'many, much, a lot'
       adigende   'several (of animate objects)'
       wac'a   '(a) few, (a) little'
       xa:ni   'several (of inanimate objects)'
       lä(si), tä(si) 'many, much, a lot'
       ñaŋga   '(a) little, (a) few'
       egdileŋki   'multitude of'
       adi adi   'some, several'
       ei egdileŋki   'that many, that much'

Scalar quantifiers function as prenominal uninflected modifiers within the quantified noun phrase (13.3). The quantifiers *lä(si)*, *tä(si)* and *ñaŋga* also function as degree adverbs (10.1.4). Most scalar quantifiers may stand distantly from the modified nominal, thus, they may exhibit some sort of quantifier float (24.2.1.2.2).

The quantifiers *egdi* 'many, much, a lot' and *wac'a* '(a) few, (a) little' have a number of properties not typical of other quantifiers, but otherwise characteristic of adjectives. First, they may be nominalized and act as independent headless noun phrases (22.3.2). Second, they can undergo raising (24.2.1.1.2). Consequently, they are the only scalar quantifiers that take a case and possessive inflection. Notably, the quantifier *wac'a* belongs to morphonological class II; its oblique stem is *wac'an-*.

11.2.2. Universal quantifiers

On the universal quantifiers *gä:ŋa* 'every' and *omo* 'whole' and the pronominal determiner *gele* 'each', see 9.7.

11.2.2.1. Universal quantifier *teu* 'all'

The most frequent universal quantifier is *teu* 'everybody, everything; all', often phonetically reduced to *tu:*. In certain syntactic functions it takes case inflections following the pattern of class II nouns (6.1.1), that is, it has an *n*-final stem (*teun-*) in cases other than the Nominative and the Accusative. On the collective form of the universal quantifier see 11.1.3.

11.2.2.1.1. Modifier function

The universal quantifier acts as a prenominal modifier within a quantified noun phrase (824a). Like most other modifiers it occurs either in preposition or in postposition to the head noun; in the latter case it is substantivized and inflects for case and the 3rd person (824b).

(824) a. *teu ni:-du*   'to all men'   <all man-DAT>
           teu čind'a-wa   'all birds'   <all bird-ACC>
       b. *kusige teun-di-ni* 'to all knives' <knife all-DAT-3SG>
           kusige teu-me-ni   'all knives'   <knife all-ACC-3SG>
           in'ei teu-ni   'every dog'   <dog all-3SG>.

Constructions like (824b) are referred to as modifier raising. Quantified noun phrases with the prenominal universal quantifier are addressed in 13.3; on the postnominal universal quantifier (the instance of modifier raising) see 24.2.1.1.2.

In the quantifier float construction the universal quantifier has an uninflected form; such a construction is addressed in 24.2.1.2.2.

11.2.2.1.2. Argument function

The universal quantifier *teu* serves as an autonomous pronoun with the meaning 'everything, everybody'. Examples (825) and (826) demonstrate its use in argument position. In (825) it takes the subject position, while in (826) it corresponds to the direct object role and takes the Accusative case.

(825) a. *Kalima*   *ule:-ni*   *teu*   *diga:-ti.*
       whale   meat-3SG   all   eat.PAST-3PL
       'They were all eating whale meat.' (K 114)

   b. *Teu lagbana:-ti.*
      all   get.stuck.PAST-3PL
      'All (of them) got stuck.'

(826) a. *Bi*   *teu-me-ni*   *sa:-mi.*
         me   all-ACC-3SG   know-1SG
         'I know everything.'

   b. *Nua-ni*   *teu-me-ni* (~ *teu*)   *gagi-e-ni.*
      he-3SG   all-ACC-3SG (all)   take.away-PAST-3SG
      'He took everything away.'

In the object role the morphological Accusative marking is optional, and the Nominative form can be used as well.

(827) a. *Nua-ni*   *teu*   *alamasi-gi-e-ni.*
         he-3SG   all   repeat-REP-PAST-3SG
         'He repeated everything.'

   b. *Teu*   *guŋ-ki-ni*   *exi-ni.*
      all   tell-PAST-3SG   elder.sister-3SG
      'Her older sister told us everything.' (K 7)

11.2.2.1.3. Adverbial function

The Nominative form of the universal quantifier always reduced in *tu:* in this function can be used as a continuative adverb with the meaning 'still, always, all the time.' A similar use is observed for the Russian universal quantifier *vs'e.*

(828) a. *Neŋu-ni*   *tu:*   *wakca-na:-ni.*
         younger.sibling-3SG   all   hunt-DIR.PAST-3SG
         'Her younger brother always goes hunting.' (K 127)

   b. *Adi-ma*   *aŋa-ni*   *zomo-si-u*
      how.many-ACC   year-3SG   steal-IM-2PL
      mun-e-we   *tu:-de?*
      we-0-ACC   all-FOC
      'How many years have you been robbing us all the time?' (K 180)

   c. *B'ata-ŋi-ti*   *tu:*   *wakca-i.*
      boy-AL-3PL   all   hunt-PRP
      'Their son hunts all the time.' (K 189)

11.2.2.1.4. Meanings 'whole' and 'all'

The quantifier *teu* can be associated with Singular countable nouns and mean 'whole, completely' (829) and with mass nouns and mean 'all' (830). As far as our material shows, such a meaning may only arise in quantifier float constructions, cf.:

(829) a. *Bi   tege-i   teu   ñukto:-ni.*
          me gown-1SG   all   get.wet.PAST-3SG
          'My gown is all wet.'

       b. *Zugdi-ti   teu   zegde:-ni.*
          house-3PL   all   burn.PAST-3SG
          'Their house has completely burnt down.' (K 150)

       c. *Min-e   teu   dukt'a.*
          me-0   all   beat.PERF
          'He beat me all over.' (K 5)

       d. *Zube   ige   teu   mala:-ni.*
          two   village   all   kill.PAST-3SG
          'He killed two whole villages of people.' (K 121)

       e. *Nua-ni   omo   neŋi-ni   teu   bi-s'e.*
          he-3SG   one   day-3SG   all   be-PERF
          'He was (here) the whole day.'

(830) a. *Bi   imo:-ŋi-we-i   teu   diga:-i.*
          me fat-AL-ACC-1SG   all   eat.PAST-2SG
          'You ate all my fat.' (K 30)

       b. *Käŋa   ule:-we-ni   teu   juktagi-e-ti.*
          deer   meat-ACC-3SG   all   carry-PAST-3PL
          'They carried away all the deer meat.' (K 162)

11.2.2.2. Universal quantifier *käu* 'all'

In the Northern dialect a universal quantifier *käu* (Kormušin) ~ *kai* /*tai* (Simonov) 'all' has the distribution, morphology, and usage basically identical to that of the quantifier *teu* 'all'. Given that *teu* can also be found in the Northern dialect, it is unclear whether *teu/käu* are simply phonological variants, or they also differ in other respects. Example (831) illustrates the floated quantifier *käu*; examples (832) show it in the argument position. Yet the non-floated quantifier *käu* in the modifier function does not seem to be allowed.

(831)   *Tagixule*   *kä:gdu kalima-la*   *käu*   *tagdimagi-e-ni.*
further   coastal whale-CONT   all   pull.out-PAST-3SG
'He pulled out all the whales, the distant ones and the coastal ones.'
(K 114)

(832)   a.   *Seŋke*   *zeu*   *käu*   *zegdi:-ni.*
        ledum   food   all   burn-3SG
        'The ledum, the food, everything is burning.' (K 123)

    b.   *Su:* *maŋga* *käu-käu*   *čaluga-wan-a.*
        son strong all-all   melt-CAUS-0
        'The sun is strong, it melts everything.' (K 124)

    c.   *Käu*   *gektin-zi*   *buk-ki-ti.*
        all   freeze.PP-INST   die-PAST-3PL
        'Everybody died from the cold.' (K 120)

    d.   *Käu*   *bi:-ni*   *bubu.*
        all   be-3SG   EV
        'Everything was there, apparently.' (K 109)

    e.   *dogbo*   *kai*
        night   all
        'all night' (SKX 316)

11.2.3. Reduplication of universal quantifiers as a stylistic device

Like adverbs (10.1.6), universal quantifiers are likely to be repeated twice, which somewhat intensifies their meaning.

(833)   a.   *Teu* *niŋme-le-si-e-ni*   *käu*   *käu-de*
        all   swallow-SING-IM-PAST-3SG   all   all-FOC
        teu *ñeŋue-we.*
        all   ogre-ACC
        'He swallowed everything (completely), all the ogres.' (K 118)

    b.   *Dili-we-ni*   *teu*   *koŋko-mo-gi-e-ni*
        head-ACC-3SG   all   hit-INTN-REP-PAST-3SG
        käu käu-de.
        all   all-FOC
        'He hit all their heads (completely).' (K 111)

Chapter 12
Particles and extra-clausal elements

Particles addressed in 12.1 have no inflectional or derivational morphology. Extra-clausal elements discussed in 12.2 express various aspects of conversational interaction.

12.1. Particles

This section addresses two major functional classes of Udihe particles, the focus particles (12.1.1) and the discourse particles (12.1.2). The frequency of particles of both classes in Udihe speech is fairly high, and the meaning of each particular particle is often difficult to describe and render accurately in European languages. We will characterize them only briefly, but give numerous illustrative examples. Particles used in questions (*-nA, -nu, -As(i) ... - As(i), -nu ... -nu*) and in conjunctive and disjunctive structures (*-As(i) ... -As(i)* and *-kA ...-kA*) are addressed in Chapters 23 and 18 respectively.

From a formal point of view, particles are either cliticized, or independent. Clitics immediately follow the element in their scope and are phonologically bound to it. On the definition of clitic in Udihe see 3.5.3.1. Clitic particles will be written with a hyphen. The non-cliticized particles are phonologically independent: they bear their own stress and behave as separate words with respect to vowel harmony, that is, have only one phonetic form. They also tend to immediately follow the word over which they take scope, although they can be separated from it under certain conditions. Most of the particles in Udihe are non-clitics. Note that clitics often co-occur. When two clitics are combined, the output form behaves as a complex independent particle (*dele, deke, gdele*), see 3.5.3.2.

Although particles and degree adverbs (10.1.4) have partially intersecting functions, they differ syntactically: as distinct from adverbials, particles are not constituents of the clause and cannot be questioned.

The clitic particles *-dA, -kA* and sometimes *-lA*, as well as the independent particle *de(xe)m*, participate in a word-formation process: they derive indefinite pronouns. These cases are treated in 9.6.

12.1.1. Focus particles

The focus particles indicate that the constituent in their scope bears a focus status (on the definition of focus see Chapter 24). We will distinguish between additive, restrictive, replacing, and contrastive focus. Focus particles either precede or follow the element within their scope; in the latter case they are either cliticized or phonologically independent. The preposed focus particles (*xai(si)* and *ña*) tend to take scope over the predicate or the verbal phrase, while the postposed focus particles normally take scope over a NP, adjectival phrase, adverbial or postpositional phrase. However, this rule seems to be only a preference.

If the meaning of a focus particle is difficult to render, it is glossed as FOC.

A few focus particles seem to be borrowed from the Chinese (1.5.1.2.2).

12.1.1.1. Additive particle *xai(si)*

This particle has two variants, *xai* and *xaisi*, which seem completely interchangeable. It never has a NP in its scope, but always either a predicate (a verbal phrase), an adverbial phrase, or the whole sentence.

12.1.1.1.1. Meaning 'too, also'

The particle *xai(si)* indicates the repetition of a situation, but possibly with a different subject. In this case it precedes the predicate (834a) or the verbal phrase (834b). Under the scope of negation the corresponding meaning is 'either' (835).

(834) a. *Bi*   *zugdi:*   *sagdi*   *nua-ni*
          me   home.1SG   large   he-3SG
          zugdi-ni-de   *xai(si)*   *sadgi.*
          house-SG-FOC   also   large
          'My house is large, his house is large too.'

      b. *Uti*   *neŋu-ni*   *aziga*   *xaisi*   *xula-i*
          that   younger.sibling-3SG   girl   also   blanket-REF
          gaŋna-gi-mi   *ŋene:-ni*   *zugdi-tigi.*
          take-REP-INF   go.PAST-3SG   house-LAT
          'The girl who is a younger sister of that one also took her blanket
          and went into the house.' (K 139)

(835) *Aziga-ŋi-ni*   *xaisi*   *ute*   *bede*   *e-ini*   *ča:la.*
      girl-AL-3SG   either   that   like   NEG-3SG   want
      'This girl does not want it either, like that one.'

12.1.1.1.2. Meaning 'again'

With the meaning 'again (one more time)' (the complete repetition of a situation) the particle *xai(si)* has the whole sentence in its scope. Its position is then more or less free, but normally it tends to stand closer to the predicate, if not immediately preceding it. The meaning 'again' implies a perfective situation.

(836) a. *Timana-ni   xaisi   kaja-za-mi   we:-tigi.*
       tomorrow-3SG   again   end-SUBJ-1SG mountain-LAT
       'Tomorrow I will send (him) to the mountains again.' (K 175)

   b. *Xai   ima:-zi   buge:-ni.*
      again   snow-INST   cover.PAST-3SG
      'He covered it with snow again.' (K 179)

   c. *Tuxi   xaisi   kumteg'e.*
      sledge   again   turn.over.PERF
      'The sledge turned over again.'

   d. *Abuga   xai   ŋua-gi-e-ni.*
      father   again   sleep-REP-PAST-3SG
      'The father fell asleep again.'

Under the scope of negation the particle *xai(si)* corresponds to the meaning 'not yet' (837b) or 'not again' (837a).

(837) a. *Xaisi   anči.*
       again   no
       'It is not here again.' (K 30)

   b. *Abuga   xaisi   e-si-ni   eme-gi.*
      Father   again   NEG-PAST-3SG   come-REP
      'The father has not come yet.'

12.1.1.1.3. Meaning 'still, more'

When co-occurring with an imperfective verb, the particle *xai(si)* is likely to have a continuative meaning 'more, longer, still', as shown below.

(838) a. *Xai   go:go   ŋua-za-ni.*
       more   long   sleep-SUBJ-3SG
       'He will still sleep for a long time.'

b. *Ñ'ädiga*   *wa:-la*   *bi*   *nuan-digi*   *xai*
Nadiga   kill-N   me   he-ABL   more
wa:-la   *bi-mi.*
kill-N   be-1SG
'Nadiga is lucky (in hunting) and I am more lucky than him.'

12.1.1.1.4. Meaning 'still, yet, anyway, although'

A number of examples indicate that the particle *xai(si)* has an additional contrastive meaning. In this case it takes scope over a proposition which is contrary to certain expectations, and the best English equivalents are 'still', 'yet', 'anyway', or 'although'.

(839) a.   *Su: anči*   *bi-mi*   *xai*   *ñamai.*
sun no   be-INF   still   warm
'There is no sun, yet it is warm.'

b.   *Bi läsi*   *deu-mi*   *xai*   *zuliexi ŋene-mi.*
me very   be.tired-1SG   still   further go-1SG
'I am very tired, still I go further.'

c.   *Nua-ni*   *e-zeŋe*   *ŋene*   *bi-si-ni*   *xai(si)*
he-3SG   NEG-FP   go   be-PP-3SG   still
ŋene:-ni.
go.PAST-3SG
'Although he didn't have to go, he still went.'

d.   *Bi*   *xaisi*   *xuli-zeŋe-i.*
me   still   go-FUT-1SG
'I will go anyway.'

e.   *Zua-de*   *xai*   *inŋeni bie.*
summer-FOC   even   cold   be.PRES.HAB
'Although it is summer, it is cold.'

12.1.1.1.5. Meaning 'same'

Combined with anaphorical pronouns of the series *(u)ti* (9.4.1.2, 22.1.2.2) the particle *xai(si)* means 'same, very same'.

(840) a.   *Xaisi*   *uta-du*   *maŋda bi:-ni.*
same   that-DAT   lie   be-3SG
'He is lying in the same place.'

b. *Bi-de* *xai* *utelinie* *neŋi-ni*
  me-FOC same then day-3SG
 ŋene:-mi.
 go.PAST-1SG
 'I left on the very same day.'

c. *Ei* *zulie-ni* *xuli:* *bede* *xaisi* *utebe*
  this before-3SG walk.PRP like still so
 xuli:-ni.
 walk-3SG
 'He still walks in the same way as he used to walk.'

12.1.1.3. Additive clitic particle *-dA*

This is the most frequent additive focus particle and the main means of expressing coordination in Udihe. The basic meaning is 'too', 'and', 'as well', or 'even'. It functions as a clitic and follows the word in its scope, most typically a noun. The particle *-dA* also has a word-formation function, see section 9.6 on indefinite pronouns. On the coordinative function of *-dA* see 18.1.

12.1.1.3.1. Meaning 'too, as well'

The meaning 'too, as well' in non-coordinated constructions is illustrated in (841). Under the scope of negation its meaning is 'either', illustrated in (842).

(841) a. *Ag'a* *bi-de* *ŋene-ze-mi.*
   brother me-FOC go-SUBJ-1SG
   'Brother, I will also go.' (K 111)

  b. *P'aligi* *mafa-da* *wa:-ni* *gida-zi.*
   black bear-FOC kill.PAST-3SG spear-INST
   'With his spear he killed the black bear as well.' (K 131)

(842) *Bi-de* *e-zeŋe-i* *kuŋgede.*
  me-FOC NEG-FUT-1SG pour
  'I will not pour (water) either.'

12.1.1.3.2. Meaning 'even'

In the meaning 'even' the particle *-dA* can take scope over practically every element of the clause. Example (843) illustrates the predicate within the scope of this particle, while example (844) shows the standard of comparison.

(843) a. *Nua-tigi-ni*   *tagda-mi-de*   *wadi-e-ni.*
           he-LAT-3SG   get.angry-INF-FOC   stop-PAST-3SG
           'He even stopped being angry with him.'

       b. *Taŋi-mi-de*   *e-ini*   *ñoni.*
           read-INF-FOC   NEG-3SG   can
           'He can't even read.'

       c. *Bi   bejeku   bi-si-ni-de*   *eki-je.*
           me similar be-CC-3SG-FOC   stay-IMP.2SG
           'Even if she is similar to me, stay (with her).' (K 166)

(844) *Zugdi-digi-de*   *sagdi*   *ni:*   *eme:-ni.*
       house-ABL-FOC   big   man   come.PAST-3SG
       'A man came who was even bigger than a house.'

12.1.1.3.3. The emphatic focus function

The particle *-dA* can be used in order to emphasize the assertion associated with the corresponding element without bringing about the additive meaning. In other words, the element within its scope expresses new information that is not necessarily construed as "additive". Such a focus particle takes scope over any sort of constituent, for example, a subject (845), a predicate (846), and a postpositional phrase (847). It easily co-occurs with other elements that normally bear the focus in the sentence, such as the negative auxiliary (848a), a quantified NP (848b), or an emphatic reflexive pronoun (848c).

(845) *Alagdig'a*   *bejeni*   *belie.*   *Uta-da*   *tonzilo:-ni*
       beautiful   very   girl   that-FOC   jump.PAST-3SG
       Uza   'ai-ni-de.
       Uza   brother-3SG-FOC
       'A very beautiful girl. Uza's brother jumped at her.' (K 110)

(846) a. *Nua-ni*   *bogdolo-ni*   *eŋme-de.*
           he-3SG   shoulder-3SG   wide-FOC
           'He has wide shoulders.'

       b. *Pakula*   *zo:ŋku*   *bi-mi-de*   *zaŋa*
           Pakula   poor   be-INF-FOC   cheerful
           bi-si-ni.
           be-PAST-3SG
           'Although Pakula was poor, he was cheerful.'

c. *Bi taŋi-e-mi*   *men-e teu*   *egzeli:*
me read-PAST-1SG   REF-0 all   understand.PRP
dexi-de.
until-FOC
'I kept reading until I understood everything.'

(847) *Ono   tukä-u   guläku bede-de   asi   tuge-zi?*
how   run-2PL   map   like-FOC   very   quick-INST
'Why are you running very quickly, like mad people?'

(848) a. *Nua-ni   Moskva-la   e-si-ni-de   i:n-e.*
he-3SG   Moscow-LOC   NEG-PAST-3SG-FOC come-0
'He didn't reach Moscow.'

b. *Omo   kusige-we-de   xebu-je.*
one   knife-ACC-FOC   take-IMP.2SG
'Take (at least) one knife.'

c. *Jexe-zeŋe-ni   men-e-de.*
sing-FUT-3SG   REF-0-FOC
'He himself will sing.'

As a particle encoding the focus element in the sentence, *-dA* is often combined with other focus particles discussed in this section. In (849) it co-occurs with the restrictive focus particle *m'ei* 'only' (12.1.1.9) and in (850) it co-occurs with the additive particle *ña* 'more' (12.1.1.4).

(849) a. *Ei   getu-we-fi*   *magi-kca-la:-mi*   *ketu*
this PL-ACC-REF.PL   kill-DES-PURP-SS   very
emende   kägampa-ni   *keje-we-ni*   *ceze-mi*
which   lier-3SG   word-ACC-3SG   believe-INF
m'ei-de   bie   *getu   tu:-we*
only-FOC   be.PRP.HAB   PL   shaman.pole-ACC
teu   tokto-gi-e-mi.
all   cut-REP-PAST-1SG
'I have cut down their shaman pole intending to kill them, having very much believed the words of this witch-liar.' (K184)

b. *Zugdi   do-lo-ni*   *xonto-zi*   *m'ei-de*
house   inside-LOC-3SG   other-INST   only-FOC
aisi-gi-si-e-ni.
mend-REP-IM-PAST-3SG
'She arranged everything in the house, only in a different way.'
(K 167)

(850)   *Tukti-je*   *ña*   *gugda-la-da.*
        climb-IMP.2SG   more   high-LOC-FOC
        'Climb even higher.'

The focus particle *-dA* with an emphatic impact is commonly present on predicative adjectives within copular constructions (17.2.2.1.1) and on predicate adverbials, especially when they stand in the immediately postverbal position (see the examples in 10.1.7.1).

12.1.1.3.4. Exclamative function

Often the emphatic focus particle *-dA* is used in exclamations like those presented in (851).

(851)   a.   *Si*   *ise-si-je*   *ono*   *uligdig'a-i-de.*
             you   see-IM-IMP.2SG   how   beautiful-FOC-FOC
             'Look, how beautiful.'
        b.   *Si*   *zueze-le-i*   *ketu*   *egdi-de*
             you   table-LOC-2SG   very   many-FOC
             b'oto.
             mushroom
             'How many mushrooms there are on your table!'
        c.   *Nua-ni*   *alagdig'a-i-de.*
             he-3SG   beautiful-FOC-FOC
             'How beautiful he is.'

12.1.1.4. Additive particle *ña*

The non-clitic additive particle *ña* is specialized in the meaning 'again, once more'. Normally its position is directly before the predicate or the verbal phrase.

12.1.1.4.1. Meaning 'again, once more'

The semantic difference between *ña* and *xai(si)* is hard to estimate and in fact these two particles can co-occur. In (852) we present examples of the particle *ña* with the meaning 'again'.

(852)   a.   *Bi*   *abuga-i*   *ña*   *ŋua-ini.*
             me   father-1SG   again   sleep-3SG
             'My father is sleeping again.'

b. *Ña*   *eme-gi-zeŋe-i.*
   again   come-REP-FUT-1SG
   'I will come again.'

c. *Ña*   *ilakta-ŋi-e-ni*   *kalima-la.*
   again   appear-REP-PAST-3SG   whale-CONT
   'The whale appeared again.' (K 117)

Within a negative polarity sentence the meaning of this particle is 'not anymore' (853). However, it cannot express the meaning 'not yet', as *xaisi* does (12.1.1.1.2).

(853) a. *Ña*   *e-zeŋe-i*   *eme-gi.*
      again   NEG-FUT-1SG   come-REP
      'I will not come anymore.'

b. *Ña*   *ali-de*   *e-zeŋe-i*   *ŋele.*
    again   when-IND   NEG-FUT-1SG   be.afraid
    'I will never be afraid anymore.'

12.1.1.4.2. Meaning 'also, as well'

It seems that the particle *ña* can correspond to the meaning 'also, as well' and express the repetition of the same situation by a different participant.

(854) a. *Gun-e-mi*   *ña*   *tiŋmel'e.*
      say-0-INF   also   fell.PERF
      'Having said (that) she also fell down (as did someone else).'
      (K 186)

b. *Uta-digi* *ña*   *uti-de*   *xai*   *dian-a-ini.*
    that-ABL again that-FOC again speak-0-3SG
    'Then that one also spoke again.' (K 188)

c. *Ña*   *diga-la-ni*   *olokto-si-ze-ni.*
    also   eat-PURP-3SG   cook-IM-SUBJ-3SG
    'She is also going to cook some food for them.'

12.1.1.4.3. Meaning 'more, another'

When it precedes a noun phrase the particle *ña* also means 'more, another'. However, relevant examples are rather infrequent.

(855) a. *Ña*   *omo*   *ige-le*   *i:ŋ-ki-ni.*
      more   one   village-LOC come-PAST-3SG
      'He came to one more village.' (K 120)

b. *Ña*   *gagda-wa-ni*   *gakpa:-ni.*
   more   second-ACC-3SG   shoot.PAST-3SG
   'He shot one more.'

12.1.1.5. Contrastive particle *tene*

The contrastive particle *tene* may have appeared as a contraction of two contrastive clitics *-tA* and *-nA*. These clitics are not frequent. On the former see 12.1.1.11.2; the latter mostly occurs in the Northern dialect.

12.1.1.5.1. Meaning 'and, but, while'

The contrastive particle *tene* is placed immediately after the focused element, normally a subject. It indicates that the whole situation is opposed to another situation, which necessarily has a different subject participant. Normally, the contrasting situation is explicitly expressed in the context as well. The two situations can be completely different, and be related only because they take place at the same time, as in (856). Alternatively, they can share the predicate and then, apart from involving different subjects, the two situations can also differ in time reference, as in (857).

(856) a. *Bi* *mama-i*   *bude:-ni*   *bu*
      me grandmother-1SG   die.PAST-3SG   we.EX
      tene   *zugdi-tigi* *ba:na-i*   *bi-s'e-u.*
      CONT   house-LAT   move-PRP   be-PERF-1PL.EX
      'My grandmother died while we were moving.'
   b. *Bi* *ŋene-isi*   *nua-ti*   *diga-mi*   *tene*
      me go-PC.1SG   he-3PL   eat-INF   CONT
      metu-o:-ti
      finish-PAST-3PL
      'I came but they had already finished eating.'
   c. *Si*   *kui-ŋi:*   *egdi* *bi* *tene*
      you   force-AL.2SG much me CONT
      sin-digi *tuge*   *bi-mi.*
      you-LAT   quick be-1SG
      'You have a lot of strength, but I am faster than you.'
   d. *Yegdige* *tene* *zu:* *belie-zi*   *mamasa-la:-ni*
      hero   CONT two girl-INST   wife-V-PAST-3SG
      mamaka *tene* *eni-ti*   *o-isi-ni.*
      old.woman CONT mother-3PL   became-PC-3SG
      'The hero married the two girls, and the old woman became their mother.' (K 108)

(857) a. *Ekize*   *ni-de*   *e-s'e*   *eme*   *si*
          long   who-IND   NEG-PERF   come   you
          tene   *eme:-i.*
          CONT   come.PAST-2SG
          'Nobody had come for a long time, and then you came.' (K167)

     b. *Bi*   *tene*   *ei*   *dogbo-ni*   *bude-zeɳe-i,*
         me   CONT   this   night-3SG   die-FUT-1SG

         guɳ-ki-ni,   *bi*   *neɳu-mi*
         say-PAST-3SG   me   younger.sibling-1SG

         tene   *timana*   *dogbo-ni*   *bude-zeɳe-ni.*
         CONT   tomorrow   night-3SG   die-FUT-3SG
         'She said: I will die tonight and my sister will die tomorrow night.'
         (K 132)

12.1.1.5.2. Non-contrastive meaning

The contrast may not be that explicit. In (858) the contrastive meaning of *tene* is not obvious, and it might simply indicate the introduction of a new participant into the text. Yet this is not a frequent option.

(858) *Seuni:*   *seuni:*   *xulis'e,*   *guɳ-ki-ni,*   *Zaɳdalafu*
       awful   awful   come.PERF   say-PAST-3SG   Zandalafu
       tene-de.
       CONT-FOC
       'She said: an awful Zandalafu came.' (K 105)

12.1.1.5.3. Non-subject contrast

In a few examples in our corpus the particle *tene* follows a non-subject element, and expresses contrastive focus.

(859) a. *Uta-digi*   *tene*   *waɳba*   *diga:-ni.*
          that-ABL   CONT   tortoise eat.PAST-3SG
          'And then (only then) the tortoise ate (not before).' (K 137)

     b. *Pakula men-e*   *kawa-tigi:*   *neu-gi-e-ni*
         Pakula   REF-0 tent-LAT.REF   put-REP-PAST-3SG

         loɳko-wo,   *käfakti-we*   *tene*   *mamasa-du-i*
         pot-ACC   bell-ACC   CONT   wife-DAT-REF
         bu-gi-e-ni.
         give-REP-PAST-3SG
         'Pakula put the pot in his tent and gave the bells to his wife.'

c. | *Zugdi* | *kä:-la-ni* | *i:n-e-lisi-ni* | *tene* |
|---|---|---|---|
| house | side-LOC-3SG | come-0-CC-3SG | CONT |
| *ñ'aula-ziga* | *ñemugdi* | *b'a-mi* | |
| child-PL | cheerful | get-INF | |

xeuti-si-li-e-ti.
shout-IM-INC-PAST-3PL
'When he was coming to the house, the children became cheerful and started shouting.'

12.1.1.6. Contrastive particle *dele*

This is not a very frequent particle. It apparently originates as a conflation of two clitic focus particles *-dA* (12.1.1.3) and *-lA* (12.1.1.7). The particle *dele* itself, however, is not a clitic: it bears its own stress and does not harmonize to the preceding word.

12.1.1.6.1. Meaning 'or else'

This particle follows the predicate and expresses warning, namely, that the corresponding situation might result from another situation and is undesirable. An approximate English translation is 'or else, otherwise', and a close Russian equivalent is *a to*. Importantly, the two clauses are syntactically conjoined and share the subject. This can lead to the passivization or causativization of the second clause, as discussed in 22.2.1.2.

(860) a. | *E-zi* | *te-wen-e* | *ei* | *teŋku-le* |
|---|---|---|---|
| NEG-IMP.2SG | sit-CAUS-0 | this | chair-LOC |
| *tiŋme-i* | *dele.* | | |
| fall-2SG | CONT | | |

'Don't sit on this chair, otherwise you will fall down.'

b. | *E-zi* | *waŋta* | *joxo-wo* | *daga-i* |
|---|---|---|---|
| NEG-IMP.2SG | touch | pot-ACC | burn-2SG |
| *dele.* | | | |
| CONT | | | |

'Don't touch the pot, otherwise you will burn yourself.'

12.1.1.6.2. Emphatic questions

In the Northern dialect this particle may attach to the *wh*-question word and add emphasis to the question.

(861) *J'eu   dele*   *ni:-ni*   *eme:-ni?*
     what   CONT   man-3SG   come.PAST-3SG
     'What sort of man came?' (K 112)

12.1.1.7. Replacing particle *-lA*

The clitic particle *-lA* is characteristic of the Northern dialect, although it is occasionally found in the Bikin dialect as well. Its main function is to encode the new (replaced) topic, so it may be termed a replacing particle. Since the topic normally corresponds to the subject (Chapter 24), the scope of the particle *-lA* is usually a subject NP.

12.1.1.7.1. Replaced topic

Normally the particle *-lA* signalizes the introduction of a new participant in the text, and is placed after the subject when it differs from the subject of the previous sentence (862a). The sentences where the subject is followed by the particle *-lA* may appear at the very beginning of the text. This, in fact, indicates that the function of this particle is to mark a new topic, whether it replaces the old topic or not. Example (862b) is the beginning of a folklore tale.

(862) a. *ŋene-mi*   *ŋene-mi*   *molo-li-e-ni*
        go-INF   go-INF   cut.tree-INC-PAST-3SG
        exi-ni.   *Zaŋdalafu-le*   *eme:-ni.*
        elder.sister-3SG Zandalafu-CONT   come.PAST-3SG
        'Walking, walking, the elder sister started cutting wood. And there came Zandalafu.' (K 104)
     b. *Neŋu-mule*   *bagdi-e-ti*   *belie-ziga-la.*
        younger.sibling-N live-PAST-3PL   fairy-PL-CONT
        'There lived two fairies, two sisters.' (K 104)

The subject which introduces a new topic and takes the particle *-lA* often takes the last linear position in the sentence, which reflects the universal word order tendency for inversion to occur in presentational constructions (see 24.1.2.2); consider the following example.

(863)　*-Aziga ...*　　od'o　　　*dili-we-i*
　　　　girl　　　　grandfather　head-ACC-REF
　　　　kume-di-ne-fi,　　　　*kume-di-ne-fi.*
　　　　flea-V-DIR-1PL.IN　　　flea-V-DIR-1PL.IN
　　　　Kume-di-li-e-ni　　　　*belie-le.*
　　　　flea-V-INC-PAST-3SG　　fairy-CONT
　　　　'Girl, come and let us look for fleas in grandfather's head. The fairy
　　　　looked for fleas.' (K 105)

The particle *-lA* also marks the change of participant (the subject) in the focus
of the speaker's attention, or the alternation of subject participants. Example
(864b) presents a dialogue where the change of person speaking (Uza) is
indicated by the particle *-lA*. In (864b) the same particle signalized the "shift"
of attention from the subject (topic) of the first sentence (Uza) to the subject
(topic) of the second sentence (Uza's brother).

(864)　a.　*Xuli-mi-de*　　　*ji:-mi-de*　　*j'eu*　*ni:*　*gakpasi:-ni?*
　　　　　walk-INF-FOC　　what-INF-FOC　what　man　shoot-3SG
　　　　　guŋ-ki-ni...　　　*Mama,*　　　*bi*　*nixe-mi,*
　　　　　say-PAST-3SG　　grandmother　me　do-1SG
　　　　　kei-gde,　　　　*hahaha,*　　*ñemugdi*
　　　　　right-CONT　　　INTER　　　funny
　　　　　b'a:-ni　　　　*Uza-la.*
　　　　　find.PAST-3SG　　Uza-CONT
　　　　　'Who is walking, shooting at people? she said. Grandmother, I do
　　　　　(this), this is right. Hahaha – Uza felt like laughing.' (K 111)
　　　b.　*Uza*　　*'ai*　　　　　*mule*　*bagdi-e-ti.*　　　　*Uza*
　　　　　Uza　　elder.brother　with　live-PAST-3PL　　　Uza
　　　　　'ai-ni-le　　　　　　*ŋene:-ni.*
　　　　　elder.brother-3SG-CONT　go.PAST-3SG
　　　　　'Uza lived with his elder brother. Uza's brother went away.'
　　　　　(K 108)

12.1.1.7.2. Multiple occurrence of the particle *-lA*

When the particle *-lA* occurs twice within one sentence it is placed both after
the subject and after the other element.

(865)　a.　*E:*　　　　*mama-la*　　　　　*täs(i) wa:-ni*
　　　　　INTER　　old.woman-CONT　　many kill.PAST-3SG
　　　　　sugzä:-wa-la　　*um'a-zi-le.*
　　　　　fish-ACC-CONT　　hook-INST-CONT
　　　　　'The old woman caught a lot of fish with a hook.' (K 109)

b. *ŋene-ixi-ni-le*   *kalima-wa-la*   *täs*
   go-PC-3SG-CONT   whale-ACC-CONT   many
   magi-e-ni   *Uza-la.*
   kill-PAST-3SG   Uza-CONT
   'When he (another) was walking, (he saw that) Uza had killed
   many whales.' (K 114)

12.1.1.7.3. Predicate in the scope of *-lA*

The particle *-lA* is less regular and transparent within the domain of the
predicate. Its meaning in this case may be merely emphatic, cf.:

(866) *Uza*   *'ai-ni*   *gakpa:-ni-la*   *uta-du.*
      Uza   brother-3SG   shoot.PAST-3SG-CONT   that-DAT
      'Uza's brother shot there with the bow.' (K 108)

12.1.1.8. Contrastive particles *gdele, -gdA, -gdu*

The contrastive clitic particle *-gdA, -gdu* is easily combined with the
contrastive clitic *-lA* (12.1.1.7), so we can speak here about the complex
particle *gdele*. Its phonological variants are *gdeli* and *gdali*. The complex
particle is mostly found in the Northern dialect, although occasionally it may
also be present in the Bikin dialect.

The contrastive particle *-gdA* occurs in the negative construction expressing
state (23.2.1.4).

12.1.1.8.1. Contrastive meaning

The meaning of the contrastive clitic particle *-gdA, -gdu* is rather difficult to
catch. In (867) it seems to be close to that of the particle *tene*, that is, it
indicates the contrast between the two situations by attaching to the subject.
Sometimes it seems simply to indicate assertive focus and/or emphasis, and in
this case it can follow virtually any element of the sentence, not necessarily the
subject, as in (868).

(867) a. G'ai ...   tuge   tuge   ŋene-mi   ja:-wa-ni
         raven   quick   quick   go-INF   eye-ACC-3SG
         tokto-mo:-ni,   *ja:-wa-ni*   *pusiewe:-ni,*
         hit-INTN.PAST-3SG   eye-ACC-3SG   pierce.PAST-3SG
         anda-i   *wa:-ni*   *g'ai   gdele.*
         friend-REF   kill.PAST-3SG raven   CONT
         'The raven, having come quickly, hit his eyes, pierced his eyes, the
         raven killed his friend.' (K 134)

     b. *Uti*   *gdele*   *bi-si-ni.*
        That   CONT   be-PAST-3SG
        'That was him.' (K 51)

(868) *Anči-gde*   *susa:-ni.*
      no-CONT   escape.PAST-3SG
      'He escaped to nowhere.' (K 164)

12.1.1.8.2. Limitative meaning

The cltitic particle *-gdA* following certain adverbs, adjectival and nominal modifies their meaning by bringing to it an additional limitative component. It may follow an inflected (869a) or uninflected (869b) form.

(869) a. *bagä:-la-gda*   'till the opposite side'
         na:-la-gda   'to the ground'
         ŋä:-la-gda   'till the riverbank'
     b. *muda-gda*   'till the end' (SK 567)
        meje-gde   'till the end' (SK 577, 677)
        xutali-gda   'till it gets red' (SK 691)
        aja-gda   'till it gets nice' (SK 697)

In the following examples the spatial meaning is almost masked by the limitative one:

(870) a. *Xegie-le-gde*   *ute*   *mo:-wo-ni*
         below-LOC-FOC   that   tree-ACC-3SG
         tugbe:-k.
         chop.PAST-EXPR
         'He chopped the tree completely (till the root).'
     b. *Xe:-gde*   *umi-je.*
        below-FOC   drink-IMP.2SG
        'Drink (it) to the dregs (bottoms up).'

c. *Joxo*   *saŋka-la-ni*   *do:-no:-ni,*
pot   handle-LOC-3SG   perch-DIR.PAST-3SG
to:-lo-ni-gde   *eme-gi-e-ni.*
fire-LOC-3SG-CONT   come-REP-PAST-3SG
'He went to perch on the pot handle and came close to the fire.'
(K 133)

d. *Kä:-la-gde*   *eme-zeŋe-i*   *zegde-mi-de.*
side-LOC-CONT   come-FUT-1SG   burn-INF-FOC
'I will come closer, (all) on fire.'

12.1.1.9. Restrictive particle *m'ei*

The restrictive particle *m'ei* 'only' is placed after the focused element.

12.1.1.9.1. Meaning 'only'

The element under the scope of the restrictive focus particle is normally a NP as in (871) or an adjectival phrase (872).

(871) a. *Nada-ma* *aŋa-ni*   *neŋu-ni-le*
     seven-ACC year-3SG   younger.sibling-3SG-CONT
     sapuligi-tigi   *m'ei-de*   *teu*   *ise-si-e-ni.*
     box-LAT   only-FOC   all   see-IM-PAST-3SG
     'For seven years her younger sister looked only at the box.' (K 118)

b. *Dili-we* *m'ei* *uji-e-ni*   *in'ei-di:.*
     head-ACC only pour.PAST-3SG   dog-DAT.REF
     'She poured (soup) for her dog, only from the (fish) heads.'

c. *Gäma* *m'ei* *ede:-i.*
     bone only become.PAST-2SG
     'Only your bones are left.'

d. *Bi zube* *k'olo-wo* *b'a:-mi*   *dieŋeze*
     me two mitten-ACC find.PAST-1SG   left
     e:-ni *m'ei-de.*
     side-3SG only-FOC
     'I found two mittens only for the left hand.'

(872) a. *Teti-gi-si-e-ni*   *imexi-we* *m'ei*
     dress-REP-IM-PAST-3SG new-ACC only
     teti-g-isi-e-ni.
     dress-REP-IM-PAST-3SG
     'She dressed, she put on only new (clothes)'. (K 169)

b.	*Magazina-la*	*da:mpi xelebe*		*m'ei*	*bi-s'e.*
	shop-LOC	old	bread	only	be-PERF

'There was only old bread in the shop.'

12.1.1.9.2. Meaning 'all'

The particle *m'ei* may indicate that a certain predication holds over the entire set of available objects. Therefore the participant that corresponds to this set is represented by the NP, which is plural either formally or semantically, as in (873) below. The particle then takes scope over the predicate (normally, an adjective) and is placed after it. Its meaning in these cases is close to that of the universal quantifier 'all', or can be rendered as 'exclusively, solely'.

(873) a. *Moxo*   *tegbeni*   *m'ei.*
      cup   dirty   only
      'The cups are all dirty (are only dirty).'

    b. *Bi*   *kusige-i*   *ic'a-ŋku*   *m'ei.*
      me   knife-1SG   small-PL   only
      'My knives are only small (are all small).'

    c. *Keŋku*   *m'ei*   *seutigi.*
      empty   only   nut
      'All nuts are empty.' (K 137)

    d. *Nua-ti*   *uligdiga-ŋku*   *m'ei.*
      he-3PL   beautiful-PL   only
      'They all are beautiful.'

When the particle *m'ei* meaning 'all' takes scope not over the whole NP but only over its modifier, there are two options for its position: it can follow this modifier as in (874a), or stand after the whole NP as in (874b).

(874) a. *Ei*   *bi*   *m'ei*   *kusige-i.*
      this me   only   knife-1SG
      'These knives are mine alone (all of them are mine).'

    b. *Ei*   *bi*   *in'ei*   *m'ei.*
      this   me   dog.1SG   only
      'These dogs are mine alone.'

12.1.1.9.3. Plural meaning

The particle *m'ei* is used with particular regularity after adjectives that are unable to take the morphological Plural affix *-ŋku* (6.1.2.1), as well as with certain other determiners that do not take morphological Plural markers (cf. the

Resultative Participle in (877)). In such cases it seems to be the only available means to encode the grammatical meaning of plurality.

(875) a. *Nua-ti*   *ugda-xi*   *m'ei.*
        he-3PL   boat-ADJ   only
        'All of them have boats.'

     b. *Nua-ni*   *unäpti-ni*   *aisi-ma*   *m'ei.*
        he-3SG   ring-3SG   gold-ADJ   only
        'Her rings are golden.'

(876) *Ei we: kei-kei*   *bi:*   *m'ei.*
      this hill steep-steep   be.PPR   only
      'These hills are steep.'

(877) *Tu: zugdi*   *kimpi-ktu*   *m'ei.*
      all house   close-RES   only
      'All the houses are closed.'

With regular adjectives the particle *m'ei* can replace the Plural marker *-ŋku* (878a), but can also co-occur with it (878b).

(878) a. *Mo:*   *sagdi* *m'ei.*
        tree   big   only
        'The trees are big.'

     b. *Bi   moxo-i*   *ic'a-ŋku*   *m'ei.*
        me cup-1SG   small-PL   only
        'I only have small cups.'

12.1.1.9.4. Meaning 'exclusively'

When the particle *m'ei* takes scope over the predicate, it may be given an approximate translation of 'exclusively, nothing except, nothing other than, pure', cf.:

(879) a. *Bi Šarika-ŋi:*   *xukti:-ni*   *m'ei,*   *wakca-ini*
        me Sharik-AL.1SG   run-3SG   only   hunt-3SG
        m'ei.
        only
        'My Sharik does nothing other than running and hunting.'

b. *Nua-ma-ni*   *niŋka*   *m'ei*   *guŋ-ki-ti*
    he-ACC-3SG   Chinese   only   say-PAST-3PL
    bue-ni   *tene*   *udie*   *bi:-ni.*
    he-3SG   CONT   Udihe   be-3SG
    'Everybody thought that he was (pure) Chinese, but he is Udihe.'

12.1.1.9.5. Degree adverb function, 'completely'

The restrictive particle *m'ei* may have the adverbial force and express that the feature exists to a high degree ('very'). In such cases it co-occurs with an adjective or a qualificative noun.

(880) a. *Ei*   *gegbe-ŋku*   *sata*   *m'ei*   *bize.*
           this   collect-N   sugar   only   must
           'These berries must be (very) sweet.'
       b. *Nua*   *ñö:-ni*   *xuta*   *m'ei*   *ede:-ni.*
           he   nose-3SG   red   only   become.PAST-3SG
           'His nose became all/completely red.'
       c. *Bi*   *ge:*   *m'ei*   *tege-we*   *gada:-mi.*
           me   bad   only   gown-ACC   buy.PAST-1SG
           'I bought a very bad dress.'
       d. *Nua-ni*   *uga-ni*   *igdi,*   *ketu*   *ge:*   *m'ei.*
           he-3SG   voice-3SG   loud   very   bad   only
           'His voice is loud and very nasty.'

12.1.1.10. Restrictive particle *sene*

The particle *sene* is used in a far more restricted set of syntactic environments, namely, in a NP.

12.1.1.10.1. Meaning 'only'

Basically the meaning of *sene* seems to be identical or close to that of the particle *m'ei* 'only'. However, it cannot take scope over the predicate as does *m'ei* (12.1.1.9.4).

(881) a. *O-du*   *si*   *sene*   *ñoni:*   *jexe-mi.*
           this-DAT   you   only   can.2SG   sing-INF
           'Only you can sing here.'
       b. *Min-du*   *da:mpi*   *kusige*   *sene*   *bie.*
           me-DAT   old   knife   only   be.PRES.HAB
           'I only have an old knife.'

12.1.1.10.2. Meaning 'except for'

When co-occurring with negation, this particle means 'except for', as illustrated in (882).

(882) a.   *Min-e-we*   *ni-de*   *e-si-ti*
        me-0-ACC who-IND   NEG-PAST-3PL

        tagda-gi   *bi*   *od'o-i*   *uti*
        recognize-REP   me   grandfather-1SG   that

        sene   *tagda-gi-e-ni*   *min-e-we.*
        only   recognize-REP-PAST-3SG   me-0-ACC
        'Nobody recognized me, except for my grandfather.'

    b.   *Bi*   *j'e-we-de*   *e-si-mi*   *diga*
        me   what-ACC-IND   NEG-PAST-1SG   eat

        zikte-we   *sene*   *diga:-mi.*
        blueberry-ACC   only   eat.PAST-1SG
        'I did not eat anything except for blueberries.'

    c.   *Ni-de*   *zugdi-du*   *anči*   *Iwana*   *sene*
        who-IND   house-DAT   no   Ivan   only

        bi:-ni.
        be-3SG
        'There is nobody at home except for Ivan.'

12.1.1.11. Rare focus particles

In this section we present examples for certain focus particles which occur rarely. It is difficult to generalize about their meaning, so no attempt is made to describe it. For more (focus) particles in the Northern dialect see Sunik (1968: 228), Kormušin (1998), Simonov and Kjalundzjuga (1998–1999), and Simonov, Kjalundjuga and Xasanova (1998).

12.1.1.11.1. The particle *-kA*

The particle *-kA* normally functions as a word-forming element deriving Indefinite pronouns with a specific interpretation (9.6.1). Occasionally it is found in a contrastive focus function as well.

(883) a.   *Bi-ke*   *e-zeŋe-i*   *menze.*
        me-CONT   NEG-FUT-1SG   do.housekeeping
        'And I won't do housekeeping.' (K 105)

b. *Di:*   *osi-gi-e-ni-ke.*
four   become-REP-PAST-3SG-CONT
'Four (of them) remained.' (K 187)

c. *Ute düixi-ni*   *ñuxa:-ni*   *bi-s'e-ke*
this inside-3SG   climb.PAST-3SG   be-PERF-FOC
nö:-ni-gdeli.
sable-3SG-FOC
'The sable must have climbed inside.'

12.1.1.11.2. The particles *-sA, c'ei, -gA, -tA*

Different focus nuances are rendered by the particles *-sA* (884a), *c'ei* (884b), -*gA* (884c), and *-tA* (885) in the examples below.

(884) a. *Timanaŋe-ni*   *te:g'e*   *Zugdeme-se*   *dig'a.*
tomorrow-3SG   wake.up.PERF   Zugdeme-FOC   eat.PERF
'The next day Zugdeme woke up and ate.' (K 145)

b. *Yegdige*   *gakpa:-ni*   *sul'ai-wa,*
hero   shoot.PAST-3SG   fox-ACC
begdi-we-ni   *c'ei-de*   *nagda:-ni.*
leg-ACC-3SG   FOC-FOC   get.into.PAST-3SG
'The hero shot at the fox and hit its leg.' (K 152)

c. *Bi-ne*   *kektene-i-ge*   *bie*   *j'e-we?*
me-CONT   lie-PRP-FOC   be.PRES.HAB   what-ACC
'And what happens if I lie down?' (K 161)

(885) a. *Si*   *min-du*   *bu-je*   *xaulie-te.*
you   me-DAT   give-IMP.2SG   please-FOC
'Give (it) to me, please.'

b. *Si*   *ise-si-e*   *omo*   *uligdig'a-ta!*
you   see-IM-IMP.2SG   how   beautiful-FOC
'Look how beautiful!'

c. *Safani:,*   *j'eu*   *jexe-i*   *mendele-te!*
boring   what   sing-PRP   always-FOC
'I am tired of you singing all the time!'

Additionally, the particle *-tA* seems to render the restrictive meaning (cf. the suffix of the Restrictive numerals *-t'A* in 11.1.7).

(886) a. *Nua-ni*   *o-lo*   *omo*   *neŋi-ni-te*   *bi-s'e.*
he-3SG   this-LOC   one   day-3SG-FOC   be-PERF
'He spent only one day here.'

b. *Bi   emne-te   xuli-s'e-i   xoton-tigi.*
   me   once-FOC   go-EXP.PERF-1SG   city-LAT
   'I have traveled to the city only once.'

12.1.1.11.3. The particle *bejeni*

The particle *bejeni* goes back to the noun *beje* 'body' in the 3rd person personal form (cf. also the personal pronoun *bueni* 'he, she', see 9.1). Its function seems to be to add an emphatic impact to an adjectival modifier. It is normally used in exclamations (887) or with the meaning 'very' (888).

(887) a. *Ge: bejeni   ni: uti.*
         bad   FOC   man   that
         'What a bad person he is!' (K 112)
      b. *Aja   bejeni   ni: eme:-ni.*
         nice   FOC   man   come.PAST-3SG
         'What a nice person came!' (K 110)

(888) *Kada   due-le-ni   sagdi   bejeni   due-le-ni*
      rock   top-LOC-3SG   large   FOC   top-LOC-3SG
      ŋene:-ni.
      go.PAST-3SG
      '(He) went to the top of a very large rock.' (K 113)

12.1.1.11.4. Restrictive particles in expressions of time

The postpositional particles *sila, s'ei, z'ei, tei* and *kei* follow an adverb or a NP with the quantifier *omo* 'one', which refers to the period of time. The examples are not numerous, so it is difficult to make a definite judgment on their semantics. Yet it seems that *sila, z'ei, tei* and *kei* tend to mean 'whole', while *s'ei* normally has a restrictive meaning ('only').

(889) a. *Omo   dogbo sila   e-si-ni   ŋua-gi.*
         one   night whole   NEG-PAST-3SG   sleep-REP
         'He didn't sleep the whole night.'
      b. *Iŋeni   kei   gusi:.*
         day   whole   play.PRP
         'He is playing the whole day.'

c. *Omo*   *sikie-ni*   *z'ei*   *mun-e-we*
   one   evening-3SG   only   we-0-ACC
   ŋele-we-si:.
   be.afraid-CAUS-IM.2SG
   'You frighten us the whole evening.' (K 158)

(890)   *J'eu-j'eu*   *wo-jo*   *omo*   *dogbo*   *s'ei.*
        what-what   do-IMP.2SG   one   night   only
        'Do everything within only one night.'

12.1.1.11.5. The particle *z'e* 'as soon as'

Examples:

(891) a. *Z'e*   *ugda-wa*   *juŋda-wan-a-isi-ni*
          soon   boat-ACC   speed.up-CAUS-0-PC-3SG
          ejekte   *ekti*   *amäixi*   *taŋda-gi:-ni.*
          flow   quick   back   carry-REP-3SG
          'As soon as he speed up his boat, the quick flow carries it back.'
    b. *Z'e*   *wokti-we*   *nientile:-ni*   *jegdige*
          soon   door-ACC   open.PAST-3SG   hero
          gida-la:-ni   *mafa-wa.*
          spear-V.PAST-3SG   bear-ACC
          'As soon as (she) opened the door, the hero stabbed the bear with the spear.' (K 129)
    d. *Z'e*   *uta-la*   *i:n-e-isi-ni*   *nada-ni*
          soon   that-LOC   come-0-PC-3SG   seven-3SG
          zimali   *kil'ai*   *ze*   *zomo-si:-ti.*
          seagull   gull   just   steal-IM-3PL
          'As soon as he came there, seven seagulls were just stealing (it).' (K 179)

12.1.2. Discourse particles

The independent discourse particles include the evidential (12.1.2.1) and epistemic (12.1.2.2) particles, as well as the particles that express different nuances of the organization of the text (12.1.2.3) and the communication between the speaker and the addressee (12.1.2.4). Evidential and modal epistemic particles are normally (though not necessarily) placed at the very end of the sentence after the final verb, while most other discourse particles occur sentence-initially.

12.1.2.1. Evidential

The main common function of evidential particles is to indicate an indirect source of information as a ground for the assertion. What is meant by an indirect source of information, however, may vary. These particles are glossed as EV.

12.1.2.1.1. Hearsay evidential

The most typical evidential particles are *gune, gunei, guŋkini,* and *gum(u).* These three particles are clearly etymologically related to the verb of speech *gun-* 'say, tell'. The words *gun-e* and *gun-e-i* seem to represent the Habitual forms (with and without the Present Participle suffix *-i*). *Gum-u* may be an old Passive form, in which the stem-final /n/ was assimilated to /m/ before a round vowel. Such a sound change is mentioned in Schneider (1936), see also 8.2.1.5. *Guŋ-ki-ni* literally means 'he said' <say-PAST-3SG>. These forms seem to have lost their original meaning, and function simply as evidential particles. They are basically synonymous and indicate that the information about the corresponding event is obtained "second-hand", so they can be characterized as hearsay evidentials. Prototypically, the information about the event is obtained from another person when this person actually says it, as exemplified in (892).

(892) *Da:-la*   *gum(u)-de*   *aŋa-ŋi-ze-i.*
      close-LOC   EV-FOC   night.shelter-V-SUBJ-2SG
      '(She says:) stay nearby for a night.' (K 113)

This case is analyzed in section 18.4 on direct speech and in section 18.3.1.3 on the finite complement clause governed by verbs of saying. Although not required by the grammar, the hearsay evidential particles are particularly common within the subordinate finite complement clause when the matrix verb is a verb of perception or saying. In the finite subordinate clause introduced with the verb of thinking *muisi-* 'think' the evidential particle *gune* is strictly obligatory (18.3.1.2).

12.1.2.1.2. Visual evidential

The same particles *gune, gunei, guŋkini,* and also *gum(u)* are used if the information expresses somebody else's sensory perception, normally seeing. For example in (893a) below the particle indicates that the situation 'there is something black' is perceived not by the speaker but by the character of the text introduced in the previous sentence ('he'). The situation of 'seeing', however, does not have to be overtly expressed in the context.

(893) a.   *Ei   ŋene:-ni.*   *Te:*   *unakta*
this go.PAST-3SG   well   river.stretch
due-le-ni   *p'aga   bie   gune.*
end-LOC-3SG   black   be.PRES.HAB   EV
'So he went. Well, at the end of the stretch of the river something
black is seen.' (K 111)

b.   *Akandi   ilaktaŋ-ka   gune.*
Akandi   appear-PERF   EV
'(He sees) Akandi has appeared.' (K 121)

c.   *ŋene-si:-ni*   *um'a-la-ni*   *omo-s'o*
go-IM-3SG   hook-LOC-3SG   one-ADJ
ta:-ni   *gune.*
caught.PAST-3SG   EV
'He went (and saw that) one (fish) was caught on his hook.' (K 29)

The information obtained through hearing can also be encoded with the
evidential particles, although this case is less regular, and the direct statement
can often be found in this situation (see the examples in section 18.3).

12.1.2.1.3. Mirative evidential

Mirative evidentials basically indicate that the speaker did not expect event
described in the clause. They are often used in the context of coming to a new
place, discovering something unexpected, entering a house, etc. Such particles
correspond to the English evidential expressions 'it turns out that',
'apparently', 'it appears', and so on. In Udihe the mirative evidentials are *bese*
and *bubu (bebe, bube)*, often combined with the focus clitic *-te (bese-te,
bebe-te, bubu-te)*, cf.:

(894) a.   *Uti   zueze   bie   bubu.*
that   table   be.PRES.HAB   EV
'Here is the table (unexpectedly).'

b.   *Nua-ni   emegi-e-ni   bubu-te.*
he-3SG   come-PAST-3SG   EV-FOC
'It turns out that he has already come.'

c.   *Exe-le   amba   bubu.*
sister-CONT   evil.spirit   EV
'It turns out that his sister is an evil spirit.' (K 130).

d.   *Aziga   eme-ini   bebe-te.*
girl   come-3SG   EV-FOC
'It looks like the girl is coming.'

e. *Bi   cawa-i   muj'ei bubu-te.*
   me cup-1SG   whole EV-FOC
   'It turns out that my cup is not broken!'

The mirative evidential particle and the hearsay evidential particle can co-occur within one sentence, as shown in (895).

(895) a. *Saŋa   cul(i)*   *si:nde-ixi-ni   zuŋe-ti   belie*
         hole   through   look-PC-3SG two-3PL   girl
         os'e-si   *uŋta   wagisi-mi*
         become.PERF-PC.SS   boot   dry-INF
         bi:-ti   gunei bebu.
         be-3PL   EV   EV
         'He is looking through the hole: the two, having become girls, are drying (his) boots.' (K 109)

     b. *ŋene:-ni   nada-zi   käu-käu*
         go.PAST-3SG   seven-INST all-all
         maga:-ti   gune   bube.
         kill.PAST-3PL   EV   EV
         'She went (and saw that) all seven (of them) were killed.' (K 177)

12.1.2.1.4. Position of the evidential particles

The examples cited in this section show the sentence-final position of the evidential particles. In (896) it is placed sentence-internally, which is a much less common option.

(896) a. *Ña   xokono-li-ge   gune   uti   omo.*
         also   moan-INC-PERF   EV   that   one
         'That one also started moaning.' (K 187)

     b. *Nada-ti   namu-la   ji:n-e-isi-ni*
         seven-ORD   sea-LOC   enter-0-PC-3SG
         käi xo:n-dile-ni   bie   gunei   zugdi-ti.
         hill top-LOC-3SG be.PRES.HAB EV   house-3PL
         'He entered the seventh sea and their house appeared on the top of the hill.' (K 181)

In the Northern dialect the evidential particle *gune* introduces a non-finite complement clause in the Accusative (see 20.2.2.6).

12.1.2.2. Epistemic particles

Some evidential particles can be used in the epistemic function, which seems to show that there is no strict border between these two categories. However, some epistemics have a specialized meaning which deviate from the evidential meaning as associated with evidential particles. Epistemic particles in a strict sense do not indicate an indirect source of information, as evidentials do, but rather the degree of the speaker's knowledge and belief about the event. Although the lack of the speaker's commitment to the truth of the proposition may be conditioned by the indirect source of information, this is not invariably the case. The most important epistemic particles in Udihe are *saina* 'perhaps' (12.1.2.2.2), *bize* 'must' (12.1.2.2.1), and *j'aza* 'of course' (12.1.2.2.3). The particle *bize* is strictly sentence-final; the other two particles are located fairly freely in the sentence.

12.1.2.2.1. The particle *bize* 'must'

The particle *bize* goes back to the Subjunctive 3rd person form of the verb *bi-* 'be'. It expresses a fairly high degree of commitment to the truth of the proposition on the part of the speaker and will be translated and glossed as 'must', cf.:

(897) a. *Ei   gegbeŋku   guači   bize.*
          this berry   bitter must
          'This berry must be bitter.'

     b. *Xeline-ini   bize.*
          hurry-3SG   must
          'He must be in a hurry.'

     c. *Bi   anda-i   nixe-ini   bize.*
          me friend-1SG   do-3SG   must
          'It must be my friend doing this.' (K 133)

The examples in (898) below show that the use of the epistemic particle *bize* is often motivated by the fact that the speaker makes a logical inference on the grounds of a certain piece of evidence. Thus, in (898b) the fact that the tea is hot must have led the speaker to the conclusion that somebody had come and made it hot. Therefore the meaning of the particle *bize* is here practically indistinguishable from the inferential evidential meaning.

(898) a. *Bi   begdi: eineŋi   ketu   aja,   ele   asigi-mi   bize.*
          me leg.1SG today   very   nice   soon   recover-1SG   must
          'My leg is well today, I must recover soon.' (K 154)

b. *Čaja*   *xekui*   *ni-ke*   *xuli-se:-ni*   *bize.*
tea   hot   who-IND   come-EXP.PAST-3SG   EV
'The tea is hot, somebody must have come.'

12.1.2.2.2. The particle *saina* 'perhaps'

The particle *saina* 'perhaps' is apparently etymologically related to the verbal stem *sa:-* 'know' augmented with the archaic converbial suffix *-na*, see 7.5.2.3.3. It expresses a low degree of the commitment to the truth from the speaker, and does not make any reference to the grounds for the assertion. This particle is normally sentence-initial and co-occurs with the verb in the Subjunctive (899a).

(899) a.   *Saina*   *nua-ni*   *timana-ni*
         perhaps   he-3SG   tomorrow-3SG
         eme-gi-ze.
         come-REP-SUBJ
         'Perhaps he will come tomorrow.'

      b.   *Min-du*   *omo-to*   *zä:*   *sene*
         me-DAT   one-REST   money   only
         bu-o:-ni.   *Saina*   *zä:-ŋi-le*
         give-PAST-3SG   perhaps   money-AL-PART
         anči   *bi:-ni.*
         no   be-3SG
         'He gave me only one ruble. Perhaps he didn't have the money.'

12.1.2.2.3. The particle *jaza(-ta)* 'of course'

The particle *jaza* 'of course' goes back to the Subjunctive form of the interrogative proverb *ja-* (9.3.4) and expresses confirmation. It is often combined with the focus clitic *-ta.*

(900) a.   *Uti*   *waŋba-ŋi-ni*   *tagda-i*   *jaza-ta.*
         that tortoise-AL-3SG   get.angry-PRP   of.course-FOC
         'Of course the tortoise was angry.'

      b.   *Timana*   *ña*   *gulin'e*   *jaza.*
         morning   again   go.PERF   of.course
         'Of course in the morning he set out again.'

12.1.2.2.4. Mirative particles with an epistemic meaning

The mirative particles (12.1.2.1.3) may be used when the speaker is generally aware of the situation, while expressing some doubt. So here the meaning shifts into the purely modal sphere. The closest English equivalent would be 'apparently' or a tag question.

(901) a. *Sin-du* *premija-wa* *imi* *e-si-ti*   *bu:?*
   you-DAT prize-ACC why NEG-PAST-3PL give
   Si *aja-ʒi* *etete-i* *bubu.*
   give you good-INST work-2SG EV
   'Why didn't they give you a prize? You work well, don't you?'

  b. *Nua-ni* *jexe-i* *bi:* *bese(-te).*
   he-3SG sing-PRP be.PRP EV-FOC
   'It is him singing, apparently.'

  c. *Nua-ni* *aja* *bubu(-te).*
   he-3SG good EV-FOC
   'He is beautiful, apparently.'

  d. *Ni:-de* *eme-iti,* *xuli:-ti* *bube-nu.*
   man-FOC come-3PL walk-3PL EV-CONT
   'People come and walk, apparently.' (K 181)

12.1.2.3. Discourse-linking particles

Discourse-linking particles express different strategies of the organization of the text by the speaker; that is, they serve speaker-text interaction.

12.1.2.3.1. The conclusive particles 'well, so'

There is a group of particles that indicate a certain conclusion or a period in the text, and these can be approximately translated as 'well' or 'so': *te* (902a), *ta:* (902b), and *ke* (839c). These particles are most typical of the Northern dialect and are normally sentence-initial.

(902) a. *Te* *jegdige* *meisi-e-ni.*
   so hero   think-PAST-3SG
   'So the hero thought.' (K 168)

  b. *Ta:* *tagi-le* *i:ŋ-ki-ni.*
   well middle-LOC enter-PAST-3SG
   'Well, he reached its middle.' (K 187)

c. *Ke*   *beliente*   *wa-gi-li-e-ni.*
well   fairy   kill-REP-INC-PAST-3SG.
'Well, the fairy came to life again.' (K 189)

Another sentence-initial particle *ge* 'well' is extremely frequent in both dialects. In the Southern dialect the sentence-final particle *eitene* 'now' (from *ei* 'this' and *tene* Contrastive focus) is also used.

(903) a. *Ge*   *timana*   *eme:-ni*   *oloxi.*
well   tomorrow   come.PAST-3SG   squirrel
'Well, next day the squirrel came.'

     b. *Ge*   *omo*   *mafasa*   *bagdi-e-ni*   *eitene.*
well   one   old.man   live-PAST-3SG now
'Well, now one old man lived.'

12.1.2.3.2. The conclusive particle *daŋdile* 'that is why, so'

The particle *daŋdile* has the resultative meaning and can approximately be translated as 'that is why, so, therefore' (Russian *to to*), although Simonov translates is as 'surprisingly'. Normally it introduces an event witnessed by the speaker, cf.:

(904) a. *ŋala-i*   *bukta-li-e-ni*   *daŋdile soŋo-ini.*
hand-REF   break-INC-PAST-3SG   so   cry-3SG
'He broke his hand, that is why he is crying.'

     b. *Eme-gi-e-ti*   *wakca-na:*   *getu*   *daŋdile*
come-REP-PAST-3PL   hunt-DIR.PP   PL   so
ule: *olokto-si-du-ge.*
meat   cook-IM-PL-PERF
'The hunters have come back, that is why (I can see that) they have cooked meat.'

12.1.2.4. Addressee-oriented particles

Several particles directly express different aspects of the communication between the speaker and the addressee of the corresponding utterance.

12.1.2.4.1. The particle *m'a* 'here it is'

The particle *m'a* 'here it is (take it), here you are' (cf. Russian *na*) is used when showing or offering something (905) or when describing a situation and

making an emphatic address to the addressee (906). Occasionally, it may be used in exclamations with the meaning 'what a' (907).

(905) a. *M'a*   *uniŋa.*
          here   spoon
          'Here is the spoon (take it).'

     b. *M'a,*   *Puza!*
          here   Puza (name of the fire spirit)
          'Here it is, Puza!' (an address to the fire spirit when feeding it).

     c. *M'a*   *iŋi-zi*   *iŋi-zi.*
          here   tongue-INST   tongue-INST
          'Here it is, (try with your) tongue.' (K 105)

(906) *M'a*   *ŋele-li-e-ni.*
      here   get.afraid-INC-PAST-3SG
      'Here it is, he got frightened.' (K 182)

(907) *M'a*   *paki*   *a:nta*   *bi:-ni*   *bube-nu.*
      here   skilful   woman   be-3SG   EV-FOC
      'What a skilful woman she turns out to be!' (K 182)

12.1.2.4.2. The hortative particles

The hortative clitic *-zA* regularly accompanies the permissive verb (see the examples in 7.8.5) and is also compatible with the imperative verb, as illustrated in (908). Used in an independent way (not as a clitic) it can be translated as 'come on' (909).

(908) a. *Unta-i*   *aikta,*   *uke-tigi*
          boot-2SG   take.off   door-LAT
          wende-ze.
          throw.IMP.2SG-HORT
          'Take off your boots and throw them to the door.' (K 109)

     b. *Aja,*   *gazi-ze,*   *gulini-u-ze.*
          good   take-HORT   go-IMP.2PL-HORT
          'OK, take (her) and go (the two of you).' (K 159)

(909) *Ganziŋa*   *seudine-we*   *soktu-te-i-ze*   *ze*
      clean   kerchief-ACC   spread-PERM-2SG-   HORT
      uta   *mui*   *ze*   *gun-te-i-ze.*
      that   horse¹ HORT   say-PERM-2SG-HORT
      'Spread a clean kerchief, then say: Horse, come on!'

The rare hortative particle *-gA* is illustrated below.

(910) a. *Oloŋo-tigi   ŋene-ze-fi-ge.*
Olon-LAT   go-SUBJ-1PL.IN-HORT
'Let us go to Olon.'

b. *Olokto-zo-m(i)-ge*   *ule:-we.*
cook-SUBJ-1SG-HORT   meat-ACC
'Let me cook the meat.'

12.2. Extra-clausal elements

12.2.1. Addresses

Addresses naturally often co-occur with the Imperative verbs. On the Imperative clause see 15.1.2.

12.2.1.1. Nominative

A neutral address in Udihe is based on the Nominative form. The address word stands either at the beginning of the clause (911), in the middle of the clause (912), where it can be even inserted within a constituent (912b) or – more seldom – at the very end of it (913).

(911) a. *Čoŋ*   *gos'o,*   *eme:-i*   *j'eu.*
Chon   uncle   come.PAST-2SG   what
'Uncle Chon, did you come!' (K 130)

b. *G'ai*   *ag'a,*   *eme:-i*   *j'eu?*
raven   brother   come.PAST-2SG   what
'Brother raven, did you come?' (K 132)

c. *A:*   *zeli*   *alasi-nde.*
INTER   bulltrout   wait-SEM
'A, bulltrout, wait a little!'

d. *Aziga-ziga   eme-je-u.*
girl-PL   come-IMP-2PL
'Girls, come!'

(912) a. *Si*   *saulasi-za-i,*   *eniŋi,   bi*
you   lighten-SUBJ-2SG   mother   me
gida-si-lege-i.
spear-V-PURP-1SG
'Wife, hold up the light so that I can hit it with the spear.' (K158)

b.　*Ketu,*　　*ag'a,*　　*aja*　　*gakpa-i.*
　　very　　　brother good　shoot-2SG
　　'Brother, you shoot very well.' (K 152)

c.　*Bu, emende,*　　*go:-tigi*　　*ŋene-u.*
　　we　witch　　　long-LAT　　go-1PL.EX
　　'Witch, we are going a long way.' (K 171)

(913)　*Tinda-gi-je*　　*min-e-we*　*aja*　*ni:.*
　　　et-REP-IMP.2SG　me-0-ACC　good　man
　　　'Let me go, nice man.'

12.2.1.2. Expressive lengthening

In an expressive address, especially when calling from a long distance, the word-final vowel exhibits a non-phonemic lengthening. An additional *e* sound is pronounced with a raising intonation. For example, in one tale the address to a fox (*sul'ai*) is *sul'aj-e*, cf. also:

(914)　*Kuŋk'ai*　　*tukca-na-ni-e-e,*　　*sakt'ai*
　　　cedar.thicket　hare-PL-3SG　　　willow.thicket
　　　tukca-na-ni-e-e.
　　　hare-PL-3SG
　　　'Hares from the cedar thicket, hares from the willow thicket!'

12.2.1.3. Vocative

Apart from the Nominative used in addresses, the Udihe also possesses a special Vocative form. It is always pronounced at a higher pitch with respect to other elements of the same clause. Formally, the Vocative has much in common with the 1st person Singular Possessive derived with the suffix -*i* (6.1.4.1). In the Vocative form the vowel /i/ follows the vowels /e/, /a/, /o/, /u/ in a regular way, so for the stems that end in these vowels the Vocative coincides with the 1st person Singular possessive form. The relation of the Vocative with the 1st person Singular Possessive is clearly seen from the fact that the Vocative is easily compatible with the 1st person possessor: *bi gagda-i* 'spouse' (literally 'my spouse'). Besides, class II nouns have the *mie*-final Vocative form, which again may go back to their 1st person Singular affix -*mi* (4.1.4.1.1): *sita-mie* 'child' (literally: 'my child').

However, for the *i*-final nouns, the Vocative form differs from the 1st person Singular Possessive: the possessive forms end in a long /i/, due to vowel contraction, while in the Vocative the stem-final vowel /i/ changes into a

diphthongoid /ie/, so the word ends in *-iei*. After a consonant the Vocative ends in *-Ai*, cf.:

(915) *Susan*   *Susan-a-i*   'Susan (a proper name)'
       k'äsa   *k'äsa-i*   'eagle'
       mamaka   *mamaka-i*   'old woman'
       baja mafa   *baja mafa-i*   'rich old man'
       boxos'o   *boxos'o-i*   'humpback'
       zoŋkus'o   *zoŋkus'o-i*   'poor man'

The Vocative is the normal form of address to relatives; in this case the use of the Nominative is rare. The following are the forms of address used for the most important kinship terms. Note that a few of them have two suppletive stems: one is found in the function of address (either in the Vocative or in the Nominative), while another is used in the declension (4.1.1.2.3).

(916) *mamasa*   *mamasa-i*   'wife'
       mafa   *mafa-i*   'husband'
       xunazi   *xunazie-i*   'sister'
       od'o   *od'o-i*   'grandfather, father-in-law'
       omölo   *omölo-i*   'grandchild'
       mama   *mama-i*   'grandmother, mother-in-law'
       gagda   *gagda-i*   'spouse'

See the examples.

(917) a. *Min-e-we*   *belesi-je*   *xunazi-ei.*
           me-0-ACC   help-IMP.2SG   sister-VOC
           'Help me, sister.'
       b. *B'agdifi*   *Miriwana*   *od'o-i.*
           hello   Miriwan   grandfather-VOC
           'Hello, grandfather Miriwan!'
       c. *Sonia*   *exe-i*   *b'agdifi.*
           Sonja   aunt-1SG   hello
           'Hello, auntie Sonja!'

12.2.1.4. Euphemistic address

When addressing relatives it is very common to treat them from the point of view of another person, normally a younger relative, a child, or a younger sibling. Thus a husband can address his wife as the mother of his children (of the first child), and vice versa, for example, *Isimi ene* (or: *Isimi eni-ni*) literally 'mother of Isimi' (K 129), *Edika ami-ni* literally 'the father of Edik', cf. also:

(918) *Ami-ti!* *Sita-ni* *tege-we* *gele-li-e-ni.*
father-3PL son-3SG gown-ACC ask-INC-PAST-3SG
'Husband! (Our) son is asking for a gown.'

Compare also the address to parents-in-law as grandparents (of your own children) mentioned in 12.2.1.3, the address to one's own mother literally as 'their mother' (*enei-ti* 'their mother'), apparently taking the position of the siblings, the address to one's own wife as *mamasa-ti* literally 'their wife', and to one's own sibling as *neŋu-ti* 'their younger brother or sister'. Finally, a daughter-in-law (the youngest son's wife) can be addressed as *omölo-tie* literally 'their granddaughter' or *neŋu-ti mamasa-ni* literally 'the wife of their younger brother'.

12.2.1.5. Affectionate address

In folklore tales and songs the word *bajani* or its expressive variant *baja-nie* (< *baja-ni* <dear-3SG>) can be used after the address itself. It goes back to the adjective *baja* 'rich', augmented with the 3rd person Singular possessive suffix *-ni*. This word is approximately translated as '(my) dear'.

(919) a. *ŋua-je* *ŋua-je* *xudasi:* *ni:*
sleep-IMP.2SG sleep-IMP.2SG sell.PRP man
baja-ni.
dear-3SG
'Sleep sleep, dear merchant.'

b. *exe-nie baja-nie* address to an older woman
<sister-3SG dear-3SG>

Masuda ni: baja-nie 'dear Masuda'
<Masuda man dear-3SG>

b'ata(-ni) baja-nie 'dear son'
<boy(-3SG) dear-3SG>

gagda-nie baja-nie 'dear husband'
<another-3SG dear-3SG>

12.2.2. Routine formulaic expressions

By "routine formulaic expressions" we mean standard formulae used for conversational interaction. They are presented below with approximate translations.

(920) *dogdi*   'listen' (only to a spouse)
       sagdi asasa   'thanks a lot'
       solodi   'hello' (on Samarga)
       xaulie   'please'
       b'agdifi   'hello'
       aja   'OK, well, please'
       asasa   'thanks'
       ge(le)   'hey, hello'
       si asasa   'thank YOU'
       banäxe, banixe   'thank you'
       iŋke   'yes, right, OK'
       ceze   'yes, right'
       äga   'well, OK'
       nä   'I don't know' (in an answer)
       e:, e   'yes, well, so'
       aja bimo: 'good bye (to somebody who remains)'
       aja ŋenemo: 'good bye (to somebody who leaves)'

In the general meaning 'no' the negative copula *anči* can be used. However its usage is somewhat restricted, and it is more natural to use the corresponding form of the negative auxiliary verb instead (see 7.3.3.3). Some examples of the use of formulaic expressions are:

(921) a. *Gele*   *zegdem*   *guas'a.*
          hey   burnt   bitch
          'Hey, you burnt bitch!' (K 112)

      b. *Ge pauza-ziga*   *sul'ai*   *ketu*   *uligdig'a*
          hey roe-PL   fox   very   beautiful
          tege-we   *b'a:-ni.*
          gown-ACC   find.PAST-3SG
          'Hey, roes! The fox has found a very beautiful dress.' (K 161)

      c. *Ge,*   *jegdige,*   *iŋke,*   *guŋ-ki-ni.*
          well   hero   right   say-PAST-3SG
          'OK, this is right, the hero said.' (K 153)

      d. *Emus'e*   *bagdi-hi-nu?*   *Anči,*   *exi*
          alone   live-2SG-CONT   no   sister
          mule   *bagdi-u.*
          with   live-1PL.EX
          'Do you live alone? No, I live with my sister.' (K 156)

12.2.3. Interjections

Udihe is extremely rich in the ideophonic words that in some way characterize the action expressed by the verb. These words have an adverbial function and are internal to the clause. They are treated in Chapter 10. In this section we will only cite interjections and onomatopoetic words that represent a direct "quotation" and function outside the clause. For more interjections and onomatopoetic words in the Northern dialect see Sunik (1968: 228–229), and text materials in Kormušin (1998) and Simonov, Kjalundzjuga and Xasanova (1998).

12.2.3.1. Interjections

Many interjections in use are borrowed from Russian. Native interjections are often based on the repetition of the same syllable. The following original interjections, which express various emotions and volitions, are found:

(922)   *aje:* (with a high pitch at the end)   surprise, pity, admiration
       a-ta-ta-ta, a-da-da-da, e-de-de-de(i)   fear
       ge-ge-ge   surprise, fear
       sie   disappointment
       a-na-na   pain
       sü(h)   tiredness; driving away hens
       baŋcai   joy when finding ginseng
       ta-ta-ta   driving on dogs
       xa-xai   threatening, indignation
       jei   surprise
       t'a   driving away dogs
       tui   'pah!'
       saña(na)wo:ni   'damn!'

12.2.3.2. Onomatopoetic words

The following are onomatopoetic words imitating sounds made by animals (923a) or other sounds (923b):

(923)   a.   *gabak*   raven
         xai-gu-gu-gu   hare
         siñ-siñ   a little bird
         kor-kor, kärre-kärre a   crow
         ke-ku   cuckoo, cf. *keku-nde-* 'cuckoo'
         xeu-xeu   dog
         kuŋtitiete-kuŋtitiete   turtledove

todi-todi	a small bird
küi-küi-küi	a small bird
ko:ŋ-ko:ŋ	raven
b. *pum-pum*	shaman tambourine
tieuŋ-tieuŋ	shaman tambourine
ki-iñ	screaming of a baby
käk-cike	cracking noise

Under (924) we list the traditional meaningless refrains used in folk songs.

(924) *jawa-jawa*
      jewe-ju
      zän-zän-zän
      dele
      ba-ba, baba-ju (cf. *baba-* 'rock to sleep')
      beke-beke, beke-ju (cf. *beke-gi-* 'rock to sleep')

Syntax

Udihe is a head-final SOV language. However, head-finality is not rigid. In some noun phrases, such as the possessive phrase, the head-final order is obligatory. Other noun phrases demonstrate a split in head properties: in certain constructions attributes may raise to the phrase-final position and receive some other head properties (24.2.1.1). Postpositional phrases and non-finite clauses are always head-final. In the matrix clause the word order is largely motivated by information structure. The most important requirement for word order at a clause level is the immediately preverbal position of the focus element (including the question words) (24.1.1).

Major grammatical relations, such as the subject, direct object, and indirect object, are rather easily identified by a cluster of grammatical properties (Chapter 15). In particular, the subject is a grammatical element associated with the highest syntactic activity and is the main controller of coreferential relations, both within the clause and clause-externally. The verb only agrees with the subject. A number of rules that change grammatical relations apply (Chapter16). The case marking patterns are uniformly based on the Accusative system with the following two exceptions. First, the direct object marked with the reflexive-possessive affix stands in the Nominative (22.3.2). Second, the single argument of certain constructions denoting state may be encoded by the Accusative noun phrase (17.2.2.5.2).

The subordinate clause mostly makes use of non-finite verbal forms, participles, converbs, and infinitives. Clause-chaining is organized around the switch-reference system, which opposes same-subject and different-subject relationships (22.5). They are morphologically encoded on the non-finite verbal forms employed in the subordinate clause. Relative clauses are formally patterned as attributive noun phrase (Chapter 19), complement clauses as possessive noun phrases with participles taking corresponding case and possessive affixes (Chapter 20).

Chapter 13
Noun phrase

A noun phrase consists of a head and an optional modifier. The following grammatical classes function as nominal heads: nouns and pro-nouns (personal pronouns, possessive pronouns, and indefinite pronouns, see Chapter 9). In headless noun phrases the head noun is omitted, while cardinal numerals, quantifiers, adjectives, pro-adjectives, and the relative clause undergo nominalization. These cases are not treated in this chapter (on the headless relative clause see section 19.5, and on the headless noun phrase see 22.2.3). Pro-nouns do not take a modifier, with the exception of the relative clause. Ordinary nouns may function as attributive forms only when there is a possessive relation between them and the head. Some exceptions are addressed in 13.7.

The following classes of modifiers are available: pro-nouns (that is, Personal pronouns), adjectives, pro-adjectives (Demonstrative and indefinite Pronouns), quantifiers, postpositional phrases, oblique-case noun phrases, and the relative clause. The relative clause is discussed in Chapter 19. Articles are missing, and definiteness may be expressed by means of 3rd person possessive affixes (4.3.1.1). Head nominals cannot be modified by a simple adverbial. Adjectival modification may also be performed by the derivational affixes -*ziga* (5.1.1.1) and -*ŋA:* (5.1.1.5).

The noun phrase is typically head-final. However, under certain information structure driven conditions the order within particular noun phrases is reversed: the modifier occupies the phrase-final position and is characterized by certain other head properties. This process will be referred to as "modifier raising" and is addressed in 24.2.1.1. As shown there, modifier raising is observed in the situation when the modifier and the head noun bear different information structure statuses. In this chapter we will only focus on noun phrases that are "neutral" (not partitioned) from the point of view of information structure, and that correspondingly do not demonstrate modifier raising. Yet, even in this case, head-finality is not rigid. Certain classes of modifiers – the postpositional phrase, the oblique-case noun phrase, and certain appositions – are always postnominal, independent of any information structure considerations, so head-finality is violated. Other modifiers (numerals and some other quantifiers) may be prenominal and postnominal without being raised. The word order within noun phrases with each individual modifier is discussed in the

corresponding sections, while section 13.10 focuses on word order within a noun phrase with several modifiers.

The syntactic relationship between the head and the modifier is encoded morphologically only in certain types of noun phrase: the possessive noun phrase (13.1) and the phrase where the modifier corresponds to the indefinite pronoun (9.6). Otherwise the modifier is merely juxtaposed to the head noun. The only lexical material that may be inserted between the head and the modifier are focus particles, cf.:

(925)   *Sita-i*   *tene*   *bugdi-le-ni*   *su:ne:-k.*
        child-REF   CONT   leg-LOC-3SG   string.PAST-EXPR
        'He strung his child's legs.'

On discontinuous noun phrases see 24.2.1.2.

Attributive agreement in case is absent with the notable exception of some quantifiers (13.3.4), some types of appositions (13.8.2), and relative clauses (see Chapter 19). Attributive agreement in number is obligatory only when the head nominal is morphologically marked for plurality (13.2.2). In the "neutral" noun phrase discussed here the external syntactic role of the noun phrase is encoded by (case) markers on the head noun, for other cases see 24.2.1.1.

Below the noun phrases are presented according to the modifier types. For apposition see 13.9.

For the adjective phrase see 6.3, for the adverbial phrase see 10.1.7, and for the postpositional phrase see 10.2.3.

13.1. Possessive noun phrase

The most important formal characteristic of the possessive noun phrase is that the relationship between the modifier (the possessor) and the head (the possessed noun) is encoded by possessive affixes on the head. The only type of possessive noun phrase where the possessive affixes on the head noun are missing are reciprocal possessives (22.4.1.2).

As distinct from most other noun phrases, the possessive noun phrase has a fixed word order "modifier – head"; that is, it does not undergo inversion because of information structure.

Noun phrases in which the modifier corresponds to the interrogative pronouns (pro-nouns) *j'eu* 'what' or *ni* 'who' or the indefinite pronouns *j'eu-ke* 'something' and *ni-ke* 'somebody' are structurally organized in the same way as the possessive noun phrase with a nominal modifier (see 9.5.1.1).

13.1.1. Pronominal possessive modifier

The structure of the possessive (including Destinative) noun phrase with the pronominal modifier is as follows:

(926) (Personal pronoun in the Nominative/Reflexive pronoun *men-e*) – head noun + (Alienable Possessive affix) + (case affix that encodes its syntactic role) + Possessive/Reflexive affix that cross-references the Personal pronoun

Examples:

(927) *(bi) anda-i*   'my friend' \<me friend-1SG>
     (nua-ni) anda-ni   'his friend' \<he-3SG friend-3SG>
     (nua-ni) jaː-ŋi-ni   'his cow' \<he-3SG cow-AL-3SG)'
     (men-e) k'olo-i   'one's mittens' \<REF-0 mitten-REF>.
     (nua-ni) zugdi-du-ni   'in his house' \<he-3SG house-DAT-3SG>
     (su) gegbeŋku-zi-u   'with your berries' \<you berry-INST-2PL>
     (bi) kusige-ne-i   'a knife for me' \<me knife-DEST-1SG>
     (men-e) 'ana-na-mi   'a boat for oneself' \<REF-0 boat-DEST-REF>

On Personal pronouns see 9.1, on Possessive affixes see 4.1.4.

The pronominal modifier can be omitted under coreference, but is recoverable from the context or the communicative situation (928). As was discussed in 4.1.3.3, the 3rd person personal affix *-ni* can encode (situational) definiteness. In this case the position of the possessor remains unfilled; for example, (929) refers to sleeves of a dress, which in this case are definite.

(928) a. *In'ei*   *ikteme-neː-ni*   *pauza,*   *ñaː-wa-ni*
     dog   bite-DIR.PAST-3SG   roe   skin-ACC-3SG
     sieː-ni,   *uleː-we-ni*   *pahintuaː-ni,*
     skin.PAST-3SG   flesh-ACC-3SG   eat.round.PAST-3SG
     dili-we-ni   *oŋmoː-ni.*
     head-ACC-3SG   forget.PAST-3SG
     'Dogs have bitten the roe to death: they have skinned it and eaten (its) flesh, but they have forgotten (its) head.' (K 138)
   b. *Uga-i-de*   *anči.*
     voice-1SG-FOC   no
     'I don't have a voice.'
   c. *Koko*   *diliː*   *ugi-wen-e-ini.*
     Koko   head.REF   move-CAUS-0-3SG
     'Koko turns his head.'

(929)   *Uke:-we-ni*   *likpa-gi-je!*
        sleeve-ACC-3SG   roll.up-REP-IMP.2SG
        'Roll up your sleeves!'

13.1.2. Nominal possessive modifier

The structure of the possessive noun phrase with the nominal modifier is as follows:

(930) possessor noun in the Nominative – head noun + (Alienable Possessive affix) + (case affix that encodes its syntactic role) + Possessive/Reflexive affix that cross-references the possessor

Examples are:

(931) *teŋku bugdi-ni*   'a leg of the stool' <stool leg-3SG>
       aziga-ziga zugdi-ti   'the house of the girls' <girl-PL house-3PL>
       in'ei ule:-ne-ni   'meat for the dog' <dog meat-DEST-3SG>

As shown in 4.2.3, the relationship between the possessor and the possessed noun is not necessarily possessive but comprises different semantic types (gender, part-whole, quality, naming, etc.). When integrated in a sentence the head noun takes case markers which show its external syntactic role.

(932) a. *Bu   Susana   zugdi-we-ni*   *ise:-mu.*
           we   Susan   house-ACC-3SG   see.PAST-1PL.EX
           'We have seen Susan's house.'
       b. *Bi   suese   xei-we-ni*   *bukta-li-e-mi.*
           me   axe   handle-ACC-3SG   break-INC-PAST-1SG
           'I broke the handle of the axe.'
       c. *Beliente   ŋala-la-ni*   *zawa-mi-de*
           fairy   hand-LOC-3SG   take-INF-FOC
           tandana-gi-e-ni.
           pull-REP-PAST-3SG
           'He took the fairy's hand and pulled it again.' (K 189)

The chain possessive construction involving multiple possessors arises when the possessor in its turn is modified by another possessive modifier (a noun or a personal pronoun). The maximal "depth" is three levels, while longer chains are typically avoided.

(933) *bi*   *sita-i*   *anda-ni*
[me   child-1SG]   friend-3SG
'a friend of my son'

soŋgo   *nä:-ni*   *iŋgakta-ni*
[bear   skin-3SG]   hair-3SG
'the hair of the bear's fur'

bi   *keige-i*   *sita-ni*   *igi-ni*
[[me   cat-1SG]   child-3SG]   tail-3S
'my kitten's tale'

bi   *abuga-i*   *anda-ni*   *'ana-ni*
[[me   father-1SG]   friend-3SG]   boat-3SG
'the boat of my father's friend'

13.1.3. "Double" possessive noun phrase

Since Udihe has two types of possessive constructions with two different meanings, the regular Possessive (4.1.4) and the Alienable Possessive (4.1.4.1), a situation may arise when one noun stands in two different possessive relationships to two possessive modifiers of different types. In this case the possessive marking on the head noun is subject to conflict. As demonstrated by (934b), the 3rd person possessive affix that expresses the alienable possessive relationship, as in (934a), is suppressed and the head noun is only marked for regular possession. Yet, the marker of alienable possession is present.

(934) a.   *nua-ni nakta dili-ŋi-ni*   'his boar's head'
        <he-3SG boar head-AL-3SG>

        nua-ni kuŋka mo:-ŋi-ni   'his cedar tree'
        <he-3SG cedar tree-AL-3SG>

    b.   *bi nakta dili-ŋi:*   'my boar's head'
        <me boar head-AL.1SG>

        bi kuŋka mo:-ŋi: 'my cedar tree'
        <me cedar tree-AL.1SG>

13.1.4. Plurality within the possessive noun phrase

Expression of plurality is always optional in Udihe (4.2.1), thus, plurality of the head noun may remain unexpressed formally. However, within the possessive noun phrase with the pronominal possessor the plurality of the head noun can be encoded by the possessive Plural affix *-nA-* (4.1.2.3).

(935) a. *Nua-ni*   *men-e*   *neŋu-ne-zi:*
        he-3SG   REF-0 younger.sibling-PL-INST.REF.SG
        b'agdi-e-ti.
        meet-PAST-3PL
        'He met his younger siblings.'

     b. *bi*   *mo:-ŋi-ne-i*
        me tree-AL-PL-1SG
        'my firewood'

     c. *Bi* *N'ädiga*   *xanta-na-wa-ni*   *sa:-mi.*
        me Nadiga   relative-PL-ACC-3SG   know-1SG
        'I know Nadiga's relatives.'

     d. *Udie*   *ni:-ne-we-ni*   *santa-na-wa-ni,*
        Udihe   man-PL-ACC-3SG   old.people-PL-ACC-3SG
        a:nta-na-wa-ni,   *ñ'aula-na-wa-ni*
        woman-PL-ACC-3SG   child-PL-ACC-3SG
        teluŋu-si-du-ze.
        story-IM-PL-SUBJ
        'Let them tell about the Udihe old people: men, women, and children.'

Although *-nA-* is preferable in this case, the regular Plural affix *-ziga-* is also available, cf.: *su zueze-ziga-wa-u* 'your tables' <you table-PL-ACC-2PL>, *bi in'ei-ziga-wa-i* 'my dogs' <me dog-PL-ACC-1SG>. Thus, for example, *bi zube sita-i* <me two child-1SG>, *bi zube sita-ziga-i* <me two child-PL-1SG>, and *bi zube sita-na-i* <me two child-PL-1SG> are synonymous and all mean 'my two children'. The Plural suffix *-nA-* is restricted to noun phrases with a pronominal possessor. In the noun phrases with a lexical possessor only the suffix *-ziga-* marks plurality, cf.: *aziga anda-ziga-ni* <girl friend-PL-3SG> 'friend of the girl', while **aziga anda-na-ni* <girl friend-PL-3SG> is ruled out.

With Plural lexical possessors marked by the Plural affix the head noun takes either the Singular (*-ni*) or Plural (*-ti*) 3rd person agreement: On the other hand, if plurality of the modifier is not expressed on it, it must be expressed by the 3rd person Plural agreement affix on the head noun. Further, the 3rd person Plural possessive affix *-ti* may express plurality of both the possessor and the possessed. although the former interpretation is preferable: *mamasa-ti* 'their wife' and 'his wives' (SK 539). Finally, the Singular head noun may be semantically Plural (4.2.1.1.2). Thus, the noun phrase is highly ambiguous with respect to number. Plural markers either on the head or on the modifier license different readings.

(936) possessor   head   example
       SG   SG   *soŋo sita-ni*   'bear's cub,
                                bear's cubs, bears' cub, bears' cubs'
                                soŋo sita-ti
                                'bears' cub, bears' cubs, bear's cubs'
       PL   SG   *soŋo-ziga sita-ni*
                                soŋo-ziga sita-ti
                                'bears' cub, bears' cubs'
       SG   PL   *soŋo sita-ziga-ni*
                                'bear's cubs, bears' cubs'
                                soŋo sita-ziga-ti
                                'bears' cubs'
       PL   PL   *soŋo-ziga sita-ziga-ni*
                                soŋo-ziga sita-ziga-ti
                                'bears' cubs'

When the possessor noun functions as a head of its own possessive noun phrase with a pronominal modifier, its plurality may be expressed with the possessive Plural suffix *-nA-*:

(937) [*bi anda-na-i*] *zugdi-ti*   <me friend-PL-1SG house-3PL>
       [*bi anda-na-i*] *zugdi-ni*   <be friend-PL-1SG house-3SG>
       'the house(s) of my friends'

13.2. Adjectival modifier

The organization of the adjectival noun phrase is conditioned by information structure considerations (see 24.2), here we address only the prenominal noun phrase that is neutral with respect to information structure. On adjectives that take an oblique argument, and the organization of the adjectival phrase, see 6.3.

Pronominal adjectives (pro-adjectives), namely, the demonstratives *ei* 'this' and (*u)ti* 'that' (9.4), the interrogatives *j'a-ma* 'made of what', *ono-fi* 'what sort of', *ali-fi* 'what sort of, from what time', *adi-ti* 'which (in number)' (9.5.2), as well as the other pronominal determiners (such as *xoŋto* 'another', *gagda* 'another' and *gere* 'each', see 9.7) behave like other adjectives in the attributive function. However, they can only be prenominal, and never undergo modifier raising or discontinuous postposing.

13.2.1. The structure of the phrase

The structure of the adjectival noun phrase is:

(938)   adjective – head noun (+ case affix)

The head noun takes the case affixes indicating the syntactic role of the noun phrase, but there is no agreement in case between it and the attribute.

(939) a.   *C'aligi*   *mui-zi*   *eme-zeŋe-ni.*
           white   horse-INST   come-FUT-3SG
           'He will come riding a white horse.'

      b.   *Bi*   *ñamai*   *zugdi-du*   *bagdi-mi.*
           me   warm   house-DAT   live-1SG
           'I live in a warm house.'

      c.   *Nua-ni*   *aisi-me*   *weige-we*   *nodo:-ni.*
           he-3SG   gold-ADJ   earring-ACC   lose.PAST-3SG
           'She lost her golden earrings.'

      d.   *Bi*   *ze:-i*   *men-e* *sita-xi*   *in'ei-du-i*
           me   neighbor-1SG   REF-0   son-ADJ   dog-DAT-REF
           ule:-we   *bu-o:-ni.*
           meat-ACC   give-PAST-3SG
           'My neighbor gave some meat to his dog that had puppies.'

13.2.2. Plural agreement

Morphologically Plural head nouns always trigger number agreement, that is, if the head noun is marked with the Plural affix *-ziga* or the possessive Plural *-nA-* the adjective must take the Plural affix *-ŋku*, cf. examples (a) and (b) below:

(940) a.   *Uligdig'a-ŋku*   *moxo-ziga*   *bi-si-ti.*
           beautiful-PL   cup-PL   be-PAST-3PL
           'There were beautiful cups.'

      b.   **Uligdig'a*   *moxo-ziga*   *bi-si-ti.*
           beautiful   cup-PL   be-PAST-3PL
           'There were beautiful cups.'

(941) a.   *nua-ni*   *ila*   *ŋic'a-ŋku*   *sita-na-ni*
           he-3SG   three   small-PL   child-PL-3SG
           'his three small children'

b. **nua-ni*   *ila*   *ɲic'a*   *sita-na-ni*
he-3SG   three   small   child-PL-3SG
'his three small children'

The reverse is not true: the adjective in the Plural does not entail a formally Plural head noun. Thus, the plurality of the head noun may be expressed solely by the Plural affix *-ŋku-* on the adjectival modifier, although, like other means of encoding plurality, it is optional.

(942) a. *Min-du*   *imexi-ŋku*   *mo:-wo*   *juŋkäla:-ti.*
       me-DAT   new-PL   tree-ACC   carry.PAST-3PL
       'They brought me new wood.'
    b. *Bi*   *weige-i*   *imexi-ŋku*   *weige.*
       me   earring-1SG   new-PL   earring
       'My earrings (several pairs) are new.'

The possible formal patterns for expressing plurality of the head noun within the adjectival phrase are as follows:

(943) 'tall mountains'   *gugda we:*   SG-SG
                          gugda-ŋku we: PL-SG
                          gugda-ŋku we:-ziga   PL-PL
                          *gugda we:-ziga   SG-PL

The nominal head, therefore, must control number agreement on the adjectival modifier, although the head itself is not necessarily morphologically marked for plural.

Compound adjectives (6.4.4), pronominal adjectives, and some other adjectives (6.1.2.1.1) do not take Plural affixes under any conditions. For such a noun phrase plurality — if emphasized — may be expressed with the restrictive particle *m'ei* (12.1.1.9.3). However, in at least two examples at our disposal, a compound adjective bears the nominal Plural affix *-ziga*. Both cases involve ideophones in the attributive position, which either precede or follow the head.

(944) a. *xutam-ziga*   *buŋčau*
       red-PL   ginseng
       '(a lot of) red ginseng' (SKX 318)
    b. *e:xi-ziga*   *bigzam-ziga*
       frog-PL   bow.legged-PL
       'bow-legged frogs' (SKX 232)

13.3. Quantified noun phrase

The following quantifiers are observed: quantificational nouns (13.3.3), universal quantifiers (13.3.2), scalar quantifiers (13.3.4), and numerals (13.3.5). The regular word order within the quantified noun phrase is

(945)   quantifier — head noun (+ case affix)

A preposed quantifier has the bare form; the syntactic relationship between it and the head is not encoded morphologically. The universal quantifier *teu* 'all', as well as certain scalar quantifiers and quantificational nouns allow modifier raising (24.2.1.1). Most scalar and universal quantifiers participate in the quantifier float construction (24.2.1.2.2). Some scalar quantifiers and numerals may exhibit agreement in (the Accusative) case with the head (13.3.6). Together with the Accusative case agreement between the relative clause and its head (19.2.3), this is the only instance of attributive case agreement in Udihe. The number of the head noun is addressed in 13.3.1.

13.3.1. Number of the head noun

The head noun within the quantified noun phrase is normally in the Singular, that is, there is no grammatical requirement to express its plurality for any type of quantified noun phrase, cf.: *teu in'ei* 'all (the) dogs', *egdi tukca* 'many hares', *zube časa* 'two hours', etc. Although the Singular is regular, it is not ungrammatical for the Plural form to co-occur with a quantifier either. Plurality is morphologically marked on the head noun if it is emphasized, and there is a clear opposition between a single entity and many of them. Compare (946a) and (946b); in the latter plurality is marked with the suffix -*ziga*-. In (947) the Plural of the quantified noun is encoded by the possessive Plural marker -*nA*- because it also acts as the head of the possessive noun phrase.

(946) a.   *Za:*   *ñ'aula*   *w'ali-e-ti.*
           four   boy   fight-PAST-3PL
           'Four boys fought.'
     b.   *Za:*   *ñ'aula-ziga*   *omo*   *ñ'aula-tigi*
           four   boy-PL   one   boy-LAT
           wa'li-e-ti.
           fight-PAST-3PL
           'Four boys fought with one boy.'

(947) *Odo*   *zu:*   *omölo-no-du-i*   *ŋimaŋku-we*
     grandfather   two   grandchild-PL-DAT-REF   tale-ACC
     ŋimasi-e-ni.
     tell-PAST-3SG
     'The grandfather told his two grandchildren a tale.'

When the quantified noun corresponds to the subject role, the verb may show Singular and Plural agreement (15.1.1.2.2).

13.3.2. Universal quantifiers

The universal quantifier *teu* 'all' was addressed in section 11.2.2.1 in its argument and adverbial functions. In a modifier function it occurs either in preposition or postposition to the head noun, being adjacent to it in both cases. Since such behavior is typical of other modifiers and is here referred to as "modifier raising" (24.2.1.1), we will not speak of quantifier float in this case. The instances of quantifier float as such are discussed in 24.2.1.2.2. Below we illustrate the prenominal universal quantifier in the bare form.

(948) a. *Bi   o-du*   *teu*   *ni:-we*   *sa:-mi.*
          me   this-DAT   all   man-ACC   know-1SG
          'I know every person here.'
      b. *Teu jandasi-wa*   *gazi-e-ni.*
          all badger-ACC   take-PAST-3SG
          'He took away all the badgers.' (K 150)
      c. *Teu*   *wakca-i*   *ni:*   *maŋga-ŋku.*
          all   hunt-PRP   man   string-PL
          'All the hunters are strong.'

13.3.3. Quantificational nouns

Within a noun phrase quantificational nouns express a certain quantity associated with the head noun. Certain quantificational nouns can undergo modifier raising, they are treated in 13.3.3.1. Other quantificational nouns never raise (13.3.3.2). Partitive meanings may be expressed by the possessive construction (*xauje pei-ni* 'a piece of paper' <paper piece-3SG>, *sexi pei-ni* 'a piece of cloth' <cloth piece-3SG>, etc.), on these see 4.2.3.2 and 13.1.

13.3.3.1. Quantificational nouns that can raise

Qantificational nouns that can undergo modifier raising are *tie* 'pair' which refers to paired objects and ka*ŋdugu* 'half'. In non-raising constructions they precedes the head noun in the Singular.

(949)   a.   *tie uŋta*   'the pair of boots'.

   b.   *Omo*   *tie*   *weige-we*   *gada:-mi.*
         one   pair   earring-ACC   buy.PAST-1SG
         'I bought a pair of earrings.'

(950)   *Jegdige*   *sue*   ka*ŋdugu-we-ni*   *wente-mi*
         hero   whetstone   half-ACC-3SG   throw-INF
         digaŋ-ki-ni ...
         say-PAST-3SG
         'Throwing half of the whetstone the hero said ...' (SKX 240)

On the raising construction see 24.2.2.1.2.

13.3.3.2. Prenominal-only quantificational nouns

Quantificational nouns that do not raise typically denote containers (for example, *moxo* 'mug, cup, bowl', *mulexi* 'bucket', *adili* 'net'), measurements, which are usually borrowed from Russian (*metra* 'meter'), and collections (*tiemule* 'pair'). In non-raised constructions they are preposed to the head noun in the morphologically bare form. Quantificational nouns, especially nouns of measurements (952) are normally modified by cardinal numerals.

(951)   a.   *Omo*   *mulexi*   *uli-we*   *gazi:-ni.*
         one   bucket   water-ACC   carry-3SG
         'He is carrying a bucket of water.'

   b.   *Bi*   *zube*   *moxo*   *gampa-wa*   *diga:-mi.*
         me   wo   mug   porridge-ACC   eat.PAST-1SG
         'I ate two bowls of porridge.'

   c.   *Bi*   *omo*   *tie-mule*   *k'olo-wo*   *gada:-mi.*
         me   one   pair-N   mitten-ACC   buy.PAST-1SG
         'I bought a pair of mittens.'

(952) a. *Omo*   *litra*   *čaja-wa*   *kuŋgede:-ni.*
     one   liter   tea-ACC   pour.PAST-3SG
     'He poured one liter of tea.'

     b. *Tuŋa*   *kile*   *ule:-we*   *gazi-e-ni.*
     five   kilogram   meat-ACC   buy-PAST-3SG
     'He bought five kilograms of meat.'

13.3.4. Scalar quantifiers

A number of scalar quantifiers undergo modifier raising (24.2.1.1) and quantifier float (24.2.1.2.2). Some scalar quantifiers may exhibit agreement in case with the head noun (13.3.5). On headless noun phrases with scalar quantifiers see 22.2.3. Examples of prenominal scalar quantifiers are:

(953) a. *Nua-ti*   *täsi*   *uli-we*   *gada:-ti.*
     he-3PL   much   water-ACC   bring.PAST-3PL
     'They brought a lot of water.'

     b. *Läsi*   *ñoŋo-wo*   *wo:-ni.*
     much   glue-ACC   make.PAST-3SG
     'He made a lot of glue.'

     c. *Ñaŋga*   *okto-wo*   *kuŋede:-ni.*
     little   medicine-ACC   pour.PAST-3SG
     'He poured out a little medicine.'

     d. *Xa:ni*   *mo:*   *omo-t'o*   *bagdi:-ti.*
     several   tree   one-REST   live-3PL
     'Several types of tree grow separately.'

     e. *Nua-ti*   *adi-gende*   *ni:*   *ŋene:-ti.*
     he-3SG   how.many-IND   man   go.PAST-3PL
     'They went, several people.'

     f. *I:-le*   *gene-se:-i*   *si*   *ei*
     what-LOC   bring-EXP.PAST-2SG   you   this
     egdi-leŋki   *činda-wa?*
     many-ADJ   bird-ACC
     'From where did you bring so many birds?'

13.3.5. Numerals

Numerals may precede or follow the head noun, but they do not undergo raising. Cardinal numerals in the nominal form act within the headless noun phrase (22.2.3).

     Cardinal numerals (11.1.1), when used attributively, co-occur with the Singular form of the head noun (although the morphological expression of

plurality is not excluded either, see 15.1.1.2.2). Agreement in case is absent, cf.:

(954) a.   *Bi*   *ei*   *ni:-zi*   *omo*   *awtobusa-zi*
           me   this   man-INST   one   bus-INST
           geje   *ŋene:-i.*
           together   go.PAST-1SG
           'I was traveling in the same bus as these people.'

   b.   *nada*   *aziga* (or: *nada xatala*)
        'seven girls (the traditional name for the constellation Ursa Minor)'

   c.   *Jegdige*   *zu:*   *belie-zi*   *mamasa-la:-ni.*
        hero   two   fairy-INST   wife-V.PAST-3SG
        'The hero married two fairies.'

   d.   *Nua-ni*   *min-digi*   *ila*   *se:-zi*   *sagdi*
        he-3SG   me-ABL   three   year-INST   big
        bi:-ni.
        be-3SG
        'He is three years older than me.'

   e.   *Bi*   *ila*   *bä:-wa*   *wakca:-mi.*
        me   three   month-ACC   hunt.PAST-1SG
        'I was hunting for three months.'

   f.   *O-lo*   *bi:-ti*   *tuŋa*   *ni:.*
        this-LOC   be-3PL   five   man
        'There are five men here.'

On other types of numerals see 11.1.

In some adverbialized temporal expressions in the Accusative (15.4.2.6) a numeral modifier may be the locus of the marking of the external syntactic relations of the phrase, while the head is uninflected (955). When the modifier corresponds to the numeral *omo* 'one' neither the modifier nor the head adverbial are usually marked for the Accusative case (956).

(955) a.   *Tuŋaza-ma*   *aŋa-ni*   *geje*   *bagdi-e-u.*
           fifty-ACC   year-3SG   together   live-PAST-1PL.EX
           'We lived together for fifty years.'

   b.   *Nada-ma*   *aŋa-ni*   *sapuli-tigi*   *tu:*
        seven-ACC   year-3SG   box-LAT   all
        ise-si-e-ni.
        see-IM-PAST-3SG
        'For seven years she was looking at the box (for eating sticks).'
        (K 118)

c. *Nua-ni*   *eme-gi-e-ni*   *ila-ma*
he-3SG   come-REP-PAST-3SG   three-ACC
neŋi-ni   *zulie-ni.*
day-3SG   before-3SG
'He arrived three days earlier.'

d. *Tuŋa-ma*   *neŋi*   *zulie-ni*   *nua-ni*
five-ACC   day   before-3SG   he-3SG
xoton-du   *bi-si-ni.*
city-DAT   be-PAST-3SG
'Five days ago he was in the city.'

(956) *Bi*   *o-du*   *omo*   *aŋa-ni*   *bagdi-e-mi.*
me   this-DAT   one   year-3SG   live-PAST-1SG
'I lived here for one year.'

13.3.6. Case agreement within the quantified noun phrase

Attributive agreement in case in Udihe is limited only to the Accusative noun phrases where the modifier is either represented by certain quantifiers (namely, *egdi* 'a lot', *wac'a* 'little, few', *teu* 'all', *zuŋe* 'both', and the numerals), or, less frequently, a relative clause (on this see 19.2.3). Within the Accusative noun phrase the modifier that agrees with the head noun in case can be prenominal (957) or postnominal (958). Note that the latter differs from instances of quantifier raising (24.2.1.1.2) in two respects: (i) the postposed quantifier, unlike the raised quantifier, agrees in case with the head noun; (ii) quantifier raising operates independently of the syntactic position of the modifier noun, while the postposed quantifier is limited only to the Accusative noun phrase.

(957) a. *Egdi-we*   *gegbeŋku-we*   *taji-e.*
many-ACC   berry-ACC   collect-IMP.2SG
'Collect many berries.'

b. *Egdi-me*   *okto-wo*   *kapta-si-e-ti.*
much-ACC   medicine-ACC   parcel-V-PAST-3PL
'They wrapped a lot of medicine.'

c. *Si*   *wac'a-ma*   *b'oto-wo*   *taji-e-i.*
you   little-ACC   mushroom-ACC collect-PAST-2SG
'You collected few mushrooms.'

d. *Bi*   *egdi-me*   *ŋimaŋku-we*   *sa:-mi.*
me   many-ACC   tale-ACC   know-1SG
'I know many tales.'

e. *Ila-ma*   *wopti-we*   *iji-e-ni.*
three-ACC   door-ACC   enter-PAST-3SG
'She entered three doors.' (K 140)

f. *Nua-ni   teu-me-ni*   *ag'a-na-wa-ti*
    he-3SG   all-ACC-3SG   elder.brother-PL-ACC-3PL
    niŋmele-si-e-ni.
    swallow-IM-PAST-3SG
    'He swallowed all the elder brothers.' (SKX 112)

g. *Nadä-ma-ti   kamisi-we   ŋientile:-ni.*
    seven-ACC-ORD   bucket-ACC   open.PAST-3SG
    'He opened the seventh bucket (made of birch bark).' (SK 591)

(958) a. *Bue-ti   gegbeŋku-we   läsi   egdi-we   gada:-ti.*
         he-3PL   berry-ACC   very   many-ACC collect.PAST-3PL
         'They collected very many berries.'

   b. *Udie   keje-we-ni*   *wac'a-ma egze-mi.*
      Udihe   language-ACC-3SG   little-ACC understand-1SG
      'I understand Udihe (only) a little.'

   c. *Anana   imaŋku-we   egdi-me*
      long.ago   tale-ACC   many-ACC
      ima-si-e-ni.
      tell-IM-PAST-3SG
      'Earlier they told a lot of tales.'

   d. *Bi   sita-wa-na-i*   *za:-ma*   *b'a*
      me   child-ACC-PL-1SG   ten-ACC   get.PP
      bi-s'e-i.
      be-PERF-1SG
      'I gave birth to ten children.'

   e. *Čoxia   Mätu   ja:-wa-ni*   *zuŋe-we-ti*
      Choxia   Mjatu   eye-ACC-3SG   both-ACC-3PL
      jakta-gi-e-ni.
      open-REP-PAST-3SG
      'He opened both the eyes of Choxia Mjatu.' (SKX 162)

   f. *Nua-ti   teluŋu-we   egdi-me*   *sah.*
      he-3PL   story-ACC   many-ACC   know.
      'They know a lot of stories.' (SK 1098)

If the quantified noun phrase occupies a syntactic position different from that of the direct object, attributive agreement is normally absent. In the Northern dialect case agreement is optionally allowed for an Instrumental noun phrase, but this type of agreement is extremely rare.

(959) a. *Zu:-zie*   *xula-zie*   *Keteŋie*   *ada-wa*
two-INST   blanket-INST   Keteng   mountain.pass-ACC
ada-ma-za-mie.
mountain.pass-V-SUBJ-1SG
'I will cross the Keteng mountain pass with two blankets.'
(SKX 330)

   b. *Zu:-zi*   *mamasa-zi*   *osi-gi-e*   *tene.*
Two-INST   wife-INST   become-REP-PP   CONT
'He started (living) with two wives.' (SKX 136)

13.4. Pronominal determiners within the noun phrase

Pronominal determiners within the noun phrase are the Demonstratives (9.4) and certain other determiners (9.6). Pronominal determiners always stand in preposition to the head. They never raise, and never show agreement with the head nominal. In the absence of the head, Demonstratives may substantivize (22.2.3). Examples of pronominal modifiers are presented in the corresponding sections in Chapter 9.

Udihe does not have articles. The numeral *omo* 'one' is often used as an indefinite article, but is by no means obligatory in this function.

(960) a. *Omo*   *belie*   *bagdi-e-ni*   *eitene.*   *Omo*
one   fairy   live-PAST-3SG   now   one
boxo   *ni:nta*   *eme:-ni.*
humpback   man   come.PAST-3SG
'Now, there lived one girl. One humpbacked man came.'

   b. *Omo*   *zugdi-le*   *i:ŋ-ki-ni.*
one   house-LOC   enter-PAST-3SG
'He came to a house.'

13.5. Postpositional phrase as a modifier

Comitative and comparative postpositional phrases can function as nominal modifiers. In the absolute majority of cases the postpositional phrase is postposed with respect to the head noun, although certain postpositional phrases allow preposition as well.

13.5.1. Comitative postpositional phrase

As mentioned in 10.2.2.2.4, postpositional phrases with the comitative postpositions *mule*, *geje*, and *zuŋe* 'with' can function as as an independent adjunct (10.2) and as a nominal modifier. The distinction between these two

functions subsumes three formal factors. First, in clauses with comitative adjuncts the verb shows Singular agreement if the subject is in the singular. As an adjunct, the postpositional phrase can be removed from the sentence without affecting its grammaticality. On the other hand, when the comitative noun phrase modifies the subject, the verb always shows Plural agreement, independent of the number of the subject itself. Thus, if the subject is formally and semantically singular, the sentence will be ungrammatical without the postpositional phrase. Such a noun phrase also triggers Plural reflexive markers on a possessed noun.

(961)   *Kanda*   *mafa*   *mamasa*   *mule*   *alasi:-ti*
        Kanda   old.man   wife   with   wait.PRES-3PL
        men-e   *sita-fai.*
        REF-0   son-REF.PL
        'The old man Kanda and his wife are waiting for their son.' (SK 581)

Second, the postpositional noun phrase modifies a noun phrase that can basically correspond to any syntactic role. However, the postpositional phrase with an adverbial function characterizes the action by referring to the subject participants. Finally, the comitative adjunct occupies a relatively free position in the sentence, while the comitative modifier always immediately follows the head noun.

Examples of the comitative postpositional adjuncts are presented in 10.2. Examples of the comitative postpositional phrase in the modifier function are:

(962)   a.   *Ogbö*   *exi*   *zuŋe*   *bagdi-e-ti.*
             elk   frog   with   live-PAST-3PL
             'The elk and the frog lived together.'
        b.   *Bi*   *aziga-ziga-zi*   *geje*   *ŋene-u.*
             me   girl-PL-INST   together   go-1PL.EX
             'I am going together with the girls.'

As argued in 10.2.2.2.4, the postpositional phrase with the postposition *mule* 'with' expresses close (family) association between two animate participants, cf.:

(963)   a.   *Bi*   *anda*   *mule*   *ŋäixi*   *ŋene-u.*
             me   friend   with   to.the.river   go-1PL.EX
             'I go to the river with my friend.'
        b.   *Ag'a*   *neŋu*   *mule*   *mo:-wo*   *la-iti.*
             elder.brother   younger.sibling   with   tree-ACC   saw-3PL
             'The elder brother and the younger brother are sawing a tree.'

c. *Ja:*   *sita*   *mule*   *wo:kto-wo*   *diga:-ti.*
   cow   child   with   grass-ACC   eat.PAS-3PL
   'The cow and the calf were eating grass.'

d. *Soŋo*   *eni-ni*   *sita*   *mule*   *ñugi-e-ti.*
   bear   female-3SG   child   with   go.out-PAST-3PL
   'The bear female with cubs went out.'

e. *Iwana*   *mamasa*   *mule*   *eme:-ti.*
   Ivan   wife   with   come.PAST-3PL
   'Ivan came with his wife.'

With the postposition *mule* the possessive relationship as such is not formally expressed, although it is part of the inherent meaning of the postposition. When emphasized, it may be denoted by the possessive modifier, such as the reflexive pronoun *men-e* in (964), but even in this case possessive affixes on the argument of the postposition are absent. However, a sort of associative possessive relationship between the two participants that remains semantically unspecified may be encoded with the alienable possession affix *-ŋi-* (965).

(964) *Bi*   *abuga-i*   *men-e*   *abuga*   *mule*
      me   father-1SG   REF-0   father   with
      aŋa-du   *bi:-ti.*
      night.shelter-DAT   be-3PL
      'My father lives with his father in a tent.'

(965) a. *Ira-ŋi*   *mule*   *zima:-ti.*
         Ira-AL   with   visit.PAST-3PL
         'He went on a visit together with his Ira.'

     b. *Kanda*   *mafa*   *mamaka-ŋi*   *mule*   *bagdi-e-ti.*
        Kanda   old.man   wife-AL   with   live-PAST-3PL
        'The old man Kanda lived with his wife.'

     c. *Belie*   *Biatu-ŋi:*   *mule*
        fairy   Biatu-AL.REF   with
        sauli-masi-li-e-ti.
        have.feast-REC-INC-PAST -3PL
        'The fairy and her Biatu started having a feast together.' (SK 786)

When the head noun of the noun phrase modified by the comitative postpositional phrase bears a grammatical relation other than the subject, the construction is realized as a postnominal relative clause with the participle *bi:-* 'being'. As in regular internal relative clauses (19.2), it is not the head but the subordinate predicate that is marked for case.

(966) *Nua-ni   sa-ini   mafa   mamaka   mule*
he-3SG know-3SG old.man   old.woman   with
bi:-we-ti.
be.PRP-ACC-3PL
'He knows an old man with the old woman.'
literally: 'He knows the old man who is with the old woman.'

13.5.2. Comparative postpositional phrase

Comparative postpositions such as *bede* 'like', *di:ŋki-* 'of the size of', and *bubu* 'similar to' with modifier function may be both in preposition (967) and in postposition (968) to the head noun.

(967) a. *Bi   ise:-mi   keige   di:ŋki-ni   siŋe-we.*
me   see.PAST-1SG   cat   size-3SG   rat-ACC
'I saw a rat the size of a cat.'
    b. *Mene   mamasa-na-mi   bä: bede   belie-we*
REF   wife-DEST-REF   moon   like   fairy-ACC
b'a-ni.
get.PAST-3SG
'He took a fairy like a moon as a wife.' (SKX 248)

(968) *Bi   solügi   in'ei-we   sul'ai   bede   ise:-mi.*
me   orange   dog-ACC   fox   like   see.PAST-1SG
'I saw a dog that was orange like a fox.'

13.6. Oblique-case noun phrase as a modifier

Generally speaking, the oblique-case noun phrase in modifier function is not very common in Udihe. In a number of cases, as, for example, in (969), we do not have clear criteria for identifying the syntactic status of the oblique-case noun phrase (modifier vs. adjunct).

(969) a. *Bi   bagdi-mi   we:-le   zugdi-le.*
me   live-1SG   mountain-LOC   house-LOC
'I live in a house on the mountain.'
    b. *Xaba-wa   banza-digi   umi-e-ni.*
milk-ACC   bottle-ABL   drink-PAST-3SG
'He drank milk from the bottle.'

c. *Si*   *kä:-la-i*   *ni:*   *xaba-wa-ni*
    you   side-LOC-2SG   man   breasts-ACC-3SG
    zawa-ja.
    take-IMP.2SG
    'Hold the breasts of the person next to you.' (SKX 100)

d. *Zolo*   *xegie-di-ni*   *l'asa-wa*   *diga-mi*
    stone   under-DAT-3SG   small.fish-ACC eat-INF
    bi-si-ni.
    be-PAST-3SG
    'They used to eat small fish from under the stones.' (SKX 74)

Normally the modifier meaning can be rendered by means of the copular relative clause with the participle *bi:-* 'being', where the oblique-case noun phrase functions as a predicative element:

(970) a. *Bi* *moxo-lo*   *bi:-we*   *čaja-wa*
          me   mug-LOC   be.PRP-ACC   tea-ACC
          umi-e-mi.
          drink-PAST-1SG
          'I have drunk the tea from the mug.'

      b. *Ča:l(a)*   *edeisini*   *ei*   *moxo-lo*   *bi:*
          want   when   this   bowl-LOC   be.PRP
          aŋi-we   *gampa-wa*   *uniŋa-la.*
          IND-ACC   porridge-ACC spoon-V
          'If you agree, scoop the porridge in the bowl.'

Below we present only some relatively clear cases of the oblique-case noun phrase in the modifier function.

13.6.1. Instrumental noun phrase

The Instrumental noun phrase expresses the comitative meaning within the subject noun phrase. Although the subject itself is in the singular, the verb shows Plural agreement. The Instrumental noun phrase typically stands in postposition to the head nominal, but the pronominal subject itself may be omitted (972).

(971) a. *Bi* *mamasa-zi:*   *mo:-lo*   *anči*   *bi-u.*
          me   wife-INST.1SG   tree-PART   no   be-1PL.EX
          'My wife and I live without wood.'

      b. *Bi* *abuga-i*   *men-e* *sita-zi:*   *eme:-ti.*
          me   father-1SG   REF-0   son-INST.REF   come.PAST-3PL
          'The father came with his son'.

c. *Bi   od'o-i*   *ei   niŋka-zi*
   me grandfather-1SG   this Chinese-INST
   anana   *anda-mule*   *bi-si-ti.*
   long.ago friend-N   be-PAST-3PL
   'Previously my grandfather was a friend of this Chinese.'

d. *Nua-ti   si   sagdi   sita-zi   anda-mule*
   he-3PL   you   old   son-INST   friend-N
   ede:-ti.
   become.PAST-3PL
   'They became friends with your elder son.'

e. *Kuti   keige-zi   anana   aja   bi-si-ti.*
   tiger   cat-INST   long.ago   good   be-PAST-3PL
   'Tigers and cats were friends a long time ago.'

(972) *Pakula-zi   za:-mule   bi-u.*
      Pakula-INST   friend-N   be-1PL.EX
      'We are friends with Pakula.'

Note that although verbal agreement indicates plurality of the agent participants, the Instrumental noun phrase is not characterized by any subject properties, as they are identified in 15.1.1. For example, it cannot control the infinitival clause, as shown below.

(973) *Wakca-mi   Pakula   tukca-zi   ña:ma-si-e-ti.*
      hunt-INF   Pakula   hare-INST   quarrel-IM-PAST-PL
      Pakula$_i$ and a hare$_j$ had a quarrel while he$_{i/*j}$ was hunting.'

The Instrumental noun phrase in the function of the comitative adjunct is addressed in 15.4.5.7.

13.6.2. Accusative noun phrase

A few nouns assign the Accusative case to their argument. These are nouns converted from transitive verbs such as *teluŋu* 'legend, story', *jexe* 'song' (5.2.1), instrumental and other nouns derived with the suffix *-ŋku*, *-ŋkA* (5.1.1.4), for example, *nimaŋku* 'tale', and the names of measures, both those borrowed from Russian, such as *kile* 'kilogram', *kilometra* 'kilometer', and those of native origin, derived with the suffix *-lA* (5.1.2.1.2). In the following sentences one Accusative noun phrase encodes the regular direct object, while another corresponds to its argument. The Accusative argument precedes the head.

(974) a.   *Bi*   *sunzi:*   *aju-ini*   *soŋgo-wo*
         me   grandchild   like-3SG   bear-ACC
         teluŋu-si-we.
         story-V-ACC
         'My grandchild likes a story about a bear.'

       b.   *Bi*   *e-si-mi*   *oŋmo*   *imaŋku-we*
         me   NEG-PAST-1SG   forget   tale-ACC
         tukca-wa.
         hare-ACC
         'I don't forget a tale about a hare.'

       c   *Nua-ni*   *soŋgo-wo*   *ŋimaŋku-we*   *teluŋu-si-e-ni.*
         he-3SG   bear-ACC   tale-ACC   story-V-PAST-3SG
         'He told a tale about the bear. '

13.7. Nominative noun phrase

A noun phrase where the modifier is expressed by the bare Nominative is very marginal in Udihe. In such a construction the head noun corresponds to the possessor role, while the modifier means some part of the head noun or its measurement. The phrase is head-final.

(975)   *ila bugdi teŋku*   'three legged stool'
         <three leg stool>
         ila afikta zugdi   'three story house' (K 140)
         <three store house>
         di: abdä: olondo   'four leaves ginseng root'
         <four leaf ginseng>
         zu: aŋa-ni sigisa   'two year old deer'
         <two year-3SG deer.calf>
         tuŋa tede zugdi   'five story house'
         <five store house>
         ila ga: mo:-wo   'a tree with three branches' (SKX 296)
         <three branch tree-ACC>
         nada da: ñukte   'hair as long as seven fathoms' (SKX 274)
         <seven fathom hair>
         igi lumbulilie sulai   'a fox with a fluffy tail' (SKX 246)
         <tail fluffy fox>

As can be seen, the modifier typically heads its own phrase. We have only a few examples where this condition does not hold.

(976) *seutigi mo:*   'tree with pine-cones'
       \<pine.cone tree\>
       bua ege   'soul of the world' (SK 106)
       \<world soul\>

13.8. Adverbials within a noun phrase

Adverbials rarely occur within a noun phrase. The most typical examples are the superlative adverb *c'o* 'the most' and the degree adverb *belem* 'completely' which are compatible with some parametric nouns, as illustrated below.

(977) *c'o sagdinta*   'the oldest (man)'
       \<most old.man\>
       belem sagdinta   'completely old (man)'
       \<completely old.man\>
       c'o 'ai-ti   'their eldest brother' (K 117)
       \<most elder.brother-3PL\>
       c'o uke-le   'right next to the door' (SK 939)
       \<most door-LOC\>
       c'o neŋu-ti   'their youngest sibling'
       \<most younger.sibling-3PL\>

13.9. Apposition

Appositions are nouns that share a referent with the head. In Udihe they always take the Nominative form, independent of the case of the head noun, and can be both prenominal and postnominal.

13.9.1. Prenominal appositions

Most appositional nouns in Udihe are prenominal. They comprise the following types.
   (i) Appositions involving a proper name when the head noun is a kinship term, as in (978). Note that otherwise the relationship between the proper and the common noun is expressed with the possessive noun phrase (4.2.3.2).

(978) a. *Koko*   *od'o-tigi*   *ŋene:-mi.*
           Koko   grandfather-LAT   go.PAST-1SG
           'I went to grandfather Koko.'
       b. *Ñ'ädiga*   *susu*   *ketu*   *paki bi-s'e.*
           Nadiga   uncle   very   skillful be-PERF
           'Uncle Nadiga was very skillful.'

c. *Koja*   *mamaka-la*   *gene-gi-ze-mi.*
Koja   old.woman-LOC   fetch-REP-SUBJ-1SG
'I shall take (it) back from old woman Koja.'(K 193)

(ii) Although the gender relationship is normally rendered by the possessive noun phrase (4.2.3.2.3), certain expressions require the appositional construction:

(979)   *ma:ma bui*   'female of the tiger or bear'
        \<grandmother animal\>
        etige bui   'male of the tiger or bear'
        \<male animal\>
        zauŋa en'ese   'female of a salmon fish'
        \<salmon female\>
        ñ'ädiga aziga   'girl, the youngest child'
        \<youngest.child girl
        ogbö logoso   'male of the elk' (K 144)
        \<elk male\>
        sie bui, sie mafa   'adult male of the bear' (K 13019)
        \<adult.bear\>

(iii) Appositions may involve a species relationship between two nouns:

(980) a.   *Bi*   *sita-i*   *kuliga*   *guŋ-ki-ni.*
        me   child-1SG   snake   say-PAST-3SG
        'My snake son spoke.'
    b.   *xaŋa-ŋku*   *zolo*
        guess-N   stone
        'a guessing (tool) stone'
    c.   *zimali*   *kil'ai*
        seagull   gull
        'seagull' (K 179)
    d.   *labuga*   *ima:*
        snowflake   snow
        'snowflake'
    e.   *siŋe*   *mafa-i*
        mouse   old.man-VOC
        'old man mouse (addressing a mouse in a tale)'
    f.   *kanda*   *mafa*
        kanda   old.man
        'the old man kanda' (*kanda* is a generic name for a class of folklore character)

Cf. also *zima ni:* 'guest' <guest man> (SKX 314), and *nakta ni:* 'boar-man (in a game)' <boar man>.

13.9.2. Postnominal appositions

Postnominal appositions modify a personal pronoun and do not involve a proper name.

(981) *Bu udie*   *o-du*   *bagdi-u.*   *Bu*   *udie*
       we Udihe   this-DAT   live-1PL.EX   we   Udihe
       aja-zi   *wakca-mi*   *ñoni:-u.*
       good-INTR   hunt-INF   can-1PL.EX
       'We, Udihes, live here. We, Udihes, can hunt well.'

In the language of the younger generation and apparently under Russian influence a proper name may be postposed after the kinship term and behave as a syntactic head (982).

(982) *Bi   men-e*   *anda-i*   *Susana-wa*   *aju-mi.*
       me REF-0   friend-1SG   Susan-ACC   love-1SG
       'I love my friend Susan.'

In the Northern dialect postnominal opposition seems to be more widespread, cf.:

(983) a.   *wakča-i ni: au-ni bogdo*   'hunter hat "bogdo"'
            <hunt-PRP man hat-3SG *bogdo*>   (SKX 308)
       b.   *bi mafa-i amba*   'my evil spirit husband'
            <me husband-1SG evil.spirit>   (SKX 82)

In this type of apposition case agreement is possible, cf.:

(984) a.   *In'ei-we*   *guasa-wa*   *alau-gi-e-ti.*
            dog-ACC   bitch-ACC   harness-REP-PAST-3PL
            'They harnessed the bitch dog.' (SKX 208)
       b.   *Kanda*   *mafa*   *mamasa*   *mule*   *belie-we*
            kanda   old.man old.   woman   with   fairy-ACC
            Ajaula-wa   *tuxi-le*   *te-weŋ-ki-ti.*
            Ajaula-ACC   sledge-LOC   sit-CAUS-PAST-3PL
            'The old man Kanda with the old woman seated the fairy Ajaula on the sledge.' (SKX 210)

c. *Si   sita-wa-i*   *belie-we*
    you child-ACC-2SG   fairy-ACC
    mamasa-na-mi   *gele-mi.*
    wife-DEST-REF   ask-1SG
    'I am asking your daughter the fairy to marry me.' (SKX 244)
d. *B'agdi-li-e-ti*   *Mejexi mamasa-zi*   *Biala-zi*
    live-INC-PAST-3PL   Mejexi wife-INST   Biala-INST
    eniŋe-zi   *Geule-zi.*
    mother-INST   Geule-INST
    'Mejexi started living with his wife Biala and mother Geule.'
    (SKX 250)

13.10. Word order in the noun phrase with several modifiers

Noun phrases including more than one adjective are very infrequent, although altogether not excluded. More than one attributive modifier of different types may precede a head noun, though the number of such modifiers almost never exceeds two at a time. When the head noun is preceded by two or more modifiers of different types their position with respect to each other is as follows: Demonstrative – possessive – quantifier – adjective – head. Thus, Demonstratives always precedes all types of other modifiers: *ei bi anda-i* 'this my friend' <this me friend-1SG>. The quantifier precedes the adjective (985a) but follows the possessive modifier (985b).

(985) a.   *zube sagdi guese*   'two large pikes'
             <two large pike>
       b.   *bi zu: ag'a-i*   'my two brothers'
             <me two brother-1SG>

Within the possessive noun phrase the adjective or the quantifier is located immediately before its head, cf.:

(986) *Ñ'ädiga imexi zugdi-ni*   'Nadiga's new house'
        <Nadiga new house-3SG>
        bi imexi uŋta-i   'my new boots'
        <me new boot-1SG>
        aja aziga anda-ni   'a friend of the nice girl'
        <nice girl friend-3SG>
        aziga aja anda-ni   'a nice friend of the girl'
        <girl nice friend-3SG>
        tuŋa aziga abuga-ti   'the father of five girls'
        <five girl father-3PL>

However, certain examples are attested where the adjectives that modify the head noun precede the possessive modifier. Compare (987a) and (987b), where the adjective *tiŋe-fi* 'yesterday's' can be understood as referring to the head noun *xokto-wo-ni* 'his footsteps', although it does not precede it immediately. Some other examples are (988).

(987) a. *Wakca-i   ni: sagdi   kuti   xokto-wo-ni*
          hunt-PRP   man   big   tiger   footstep-ACC-3SG
          b'a-ni.
          find.PAST-3SG
          'The hunter found the footsteps of a big tiger.'
      b. *Wakca-i   ni: tiŋe-fi   kuti*
          hunt-PRP   man   yesterday-ADJ   tiger
          xokto-wo-ni   b'a-ni.
          footstep-ACC-3SG   find.PAST-3SG
          'The hunter found yesterday's tiger footsteps.'

(988) a. *Sugbu-me   emende   tege-we-ni*
          fish.skin-ADJ   witch   gown-ACC-3SG
          bu-gi-eni.
          give-REP-PAST-3SG
          'He gave the witch's gown made of fish skin back (to her).'
          (SKX 230)
      b. *nada   omoti   sulai   igi-we-ni*
          seven   identical   fox   tail-ACC-3SG
          'seven identical fox tails (ACC)' (SKX 244)

Relative clauses rarely admit other modifiers. In the following examples the external relative clause is preceded by the universal quantifier (989a) a possessive modifier , as in (989b), or followed by a numeral (989c).

(989) a. *Teu kapta-ktu   dili-ni   daŋda-daŋda.*
          all [wrap-RES]   head-3SG   wrapped-wrapped
          'His whole head is wrapped up.' (K 107)
      b. *Ei   tene   bi   ña:-wa   kai-kči*
          this CONT   me   [skin-ACC   brake-DP
          u:-kči   ba:-i.
          scrape-DP]   place-1SG
          'And this is my place for braking and scraping the skins.' (K 182)
      c. *Tokö   ojo-ni-ni   teh-i-we-ti   zu:*
          cloud   top-DAT-3G   sit-PRP-ACC-3PL   two
          aziga-wa   ise-he-ni.
          girl-ACC   see-PAST-3SG
          'He saw two girls sitting on a cloud.' (Schneider 1937: 80)

Chapter 14
Verbal valence

This chapter presents lexical and syntactic information on the valence patterns of Udihe verbs. The adjectives that take a second argument are described in section 6.3.3, which deals with the adjectival phrase.

Valence patterns are presented in schemas that indicate the semantic role and the formal encoding of each argument. This is represented in the form "semantic role/case marking". For example, the sign A/NOM means that the verb assigns the semantic role of agent, and the corresponding argument is expressed by a nominal with the Nominative case marking. The semantic roles used in this chapter are largely conventional; the corresponding meaning should be clear from the translation provided. However, we have found it convenient to use several semantic labels to generalize the semantic content of typical arguments. The following semantic labels will be used:

A — agent (also includes experiencer, force, and other possible "agent-like" valences; corresponds to the single arguments of an intransitive verb);

E — essive (secondary predicate);

P — patient or theme and the related roles (stimulus, mental goal, content, etc.);

B — benefactive (includes recipient, goal, malefactive, and the like);

CIR — circumstance (includes comitative, manner, instrument, means, and the like);

L — location (this role includes the whole range of spatial meanings, not only the strictly locational but also the directional; their exact value is usually clear from the case and postpositional marking of the corresponding argument).

All valence patterns in this section reflect the direct voice constructions. This means that the element with the semantic role of agent (A) corresponds to the grammatical relation of the subject (see 15.1). Voice-related transformations of direct voice constructions, as well as other valence-changing operations, are addressed in section 16.1. The present chapter notes, for each group of valence patterns, the possible transformations of the original direct construction, but does not fully describe them.

The formal marking of the arguments is mostly presented in terms of case marking. The usual abbreviations are used for cases in the schemas, and they may be found in the abbreviation list. Other abbreviations are also used in the presentation of valence patterns. ADV stands for "adverbial marking". It indicates that the corresponding argument can be expressed by a postpositional

phrase (mostly with a location meaning) or by spatial adverbs. For example, the verb *ŋene-* 'go' takes the agent and location arguments, the latter being expressed by a nominal in the Lative case. This is rendered in a valence schema as A/NOM, L/LAT. However, the postpositional phrase or a spatial adverb can also express the second argument.

(990) *Moskwa-tigi ŋene-*   'go to Moscow'
       <Moscow-LAT>
       tauxi ŋene-   'go there'
       <go that-LAT>
       uli bagä:za-tigi-ni ŋene- 'go to the other side of the river'
       <river other-N-LAT-3SG>

The postposition and the adverb in this case are also of the Lative type (see Chapter 10). This option is marked in brackets in the schema, so the complete valence pattern for the verb *ŋene-* would be: A/NOM, L/LAT (ADV). Only the general semantic type of spatial postpositions and adverbs is shown here (Locative, Lative, Ablative, or Prolative), their actual forms are discussed in 10.1. Verbs that may take an adjectival argument as well as nominal arguments are not treated as a separate type. Some verbs govern a complement subordinate clause. This option is described in Chapter 20. The adverbial clause of space can substitute for most arguments with the semantic role of Location; this case is dealt with in section 21.2.

We present here valence patterns for null-argument verbs, one-argument verbs, two-argument verbs, and three-argument verbs. It is assumed that the verbs take no more than three arguments (15.3). The list of verbs that corresponds to each pattern is not exhaustive, unless indicated otherwise. For most patterns example sentences are provided.

14.1. Null-argument pattern

Null-argument verbs do not assign any semantic roles and normally describe natural meteorological or calendar phenomena. Constructions with these verbs do not allow any of the voice-related transformations described in Chapter 16 except for the Causative (16.1.4). Neither do they allow the Imperative. Null-argument verbs take only the 3rd person Singular agreement markers. The difference between the three patterns described below is in the presence or absence of the semantically empty expletive subject, and in its form if it can be present. On copular subjectless expressions, see 17.2.1.

14.1.1. Null-argument verbs

The verbs that do not take the subject argument are non-derived verbs which express calendar and meteorological phenomena, for example:

(991) *tigde-*   'rain'   *bono-*   'hail'
       lada-   'rain with snow'   *ine-*   'dawn'
       gekti- 'frost'   *gäwana-* 'dawn

Besides these, certain denominal "meteorological" verbs derived with the suffixes *-gi-*, *-li-* and *-nA-* (see 8.1.1) do not require a subject.

Subjectless sentences often include space, time, or manner adverbs. A frequently used spatial adverb in such sentences is *ba:-la* 'outside' (literally: 'in nature, in the place' <place-LOC>). Examples are:

(992) a. *Ba:-la*   *ñama-li-e-ni.*
         place-LOC   get.warm-INC-PAST-3SG
         'It got warmer outside.'
     b. *Sugala-digi*   *edi-ne-ini.*
         north-ABL   wind-V-3SG
         'The wind blows from the north.'
     c. *Lou-lou*   *tamña:-na-ini.*
         dense-dense   fog-V-3SG
         'There is a dense fog.'
     d. *Täk-täk*   *gekti:-ni.*
         hard-hard   freeze-3SG
         'There is deep frost.'

In sentences with an expletive subject (14.1.2) the spatial adverb *ba:-la* 'outside' does not occur.

The verbs *ze-mu:i-* 'be hungry' and *kogo-mu:i-* 'be thirsty' are derived with the Desiderative suffix *-mu:i-*, although the base stem occurs only in the bound form. They mostly function as one-place verbs, but can sometimes be used in subjectless constructions and take default 3rd person agreement.

(993) *Ti:*   *ze-mu:i-ni,*   *ti:*   *kogo-mu:i-ni.*
      here   food-DES-3SG   here   drink-DES-3SG
      'I am hungry and thirsty.' (SKX 276)

14.1.2. Expletive subject

The Expletive subject is in no way required by the grammar, but may co-occur with null-argument verbs.

14.1.2.1. Expletive cognate subject

A number of verbs mentioned in section 14.1.1 as well as some other verbs allow an expletive Nominative subject cognate with the verb. These verbs are:

(994) *tigde tigde-*   'rain'
       bono bono-   'hail'
       lada lada-   'rain with snow'
       agdi agdi-   'clap (of thunder)'
       käŋgu käŋgu-   'be slippery'
       ine ine-   'dawn'
       tamña: tamña:-na-   'fog'
       ima: ima:-na-   'snow'
       edi edi-ne-   'wind'

The expletive subject can be modified by an adjective (995a) or another noun (995b).

(995) a.   *Bono*   *sagdä-ŋku*   *bono-ini.*
            hail   large-PL   hail-3SG
            'Large hail is falling.' (K 181)
       b.   *Uligdig'a*   *labuga*   *ima:*   *ima:-na-ini.*
            beautiful   snowflake   snow   snow-V-3SG
            'Snow is falling in beautiful snowflakes.'

Other subjectless verbs (that is, most verbs derived through suffixation) do not take an expletive subject.

14.1.2.2. Expletive *ba:*

The following verbs take the expletive subject *ba:* 'place, nature, God' (more seldom in the 3rd person possessive form *ba:-ni* <place-3SG>). Most of them describe calendar and natural events. For example:

(996) *ba: bolo-gi-*   'come (of autumn)'
       ba: dogbo-gi-li-   'come (of night)'
       ba: iŋeñi-li-   'get cold'
       ba: ine-li-   'dawn'
       ba: gäwana-   'dawn'
       ba: maga-   'bad weather, storm'

Verbs that allow the expletive subject *ba:* cannot have an expletive cognate subject and vice versa, but most verbs from both groups also follow pattern 14.1.1, that is, form subjectless constructions.

14.2. One-argument verbs (A/NOM)

Apart from the direct voice construction, one-argument intransitive verbs allow the Agentless passive (16.1.2) and Causative (16.1.3), some of them also undergo reciprocalization (16.1.5). However, the regular Passive is not possible.

The standard valence pattern for one-argument verbs is A/NOM, that is, the agent corresponds to the grammatical relation of the subject which has the Nominative form (on the definition and syntactic properties of the subject see 15.1).

(997)	ŋene-/ŋeni-	'walk, leave'	gusi-	'play'
	iñi-	'laugh'	ŋua-	'sleep'
	etete-	'work'	tetigi-	'get dressed'
	une-	'melt'	bude-	'die'

Many verbs derived from nouns and adjectives by means of interclass derivation suffixes (8.1.1) take only one argument, as do most *b'a-* compounds (8.3). Some sentence examples are:

(998) a. *In'ei   ŋene-ini.*
dog   go-3SG
'The dog is walking.'

b. *Ñ'aula-ziga   gusi:-ti.*
child-PL   play-3PL
'Children are playing.'

c. *Bi   ñamai-zi   teti-gi-zeŋe-i.*
me   warm-INST   dress-REP-FUT-1SG
'I will dress warmly.'

d. *Ei   mo: anana   degde:-ni.*
this   tree   long.ago   burn.PAST-3SG
'This tree burnt a long time ago.'

e. *Bi   ŋala-i   auli-e-ni.*
me   hand-1SG   swell-PAST-3SG
'My hand has swollen.'

14.3. Two-argument verbs

Two-argument verbs can be transitive and intransitive. In the former case their second (non-agent) argument corresponds to the semantic role of the patient and to the syntactic role of the direct object (on the definition and syntactic properties of the direct object see 15.1.2). The transitive verb allows all the voice constructions described in section 16.1: Passive and Agentless passive, Causative, and normally also Decausative and Reciprocal (the latter two are restricted by the semantics of the verb). The second argument taken by intransitive two-argument verbs is not a patient and cannot be identified as a direct object. Intransitive verbs do not allow the Passive, but form the Agentless Passive, Causative, and sometimes Reciprocal.

14.3.1. A/NOM, P/ACC

14.3.1.1. Verbs with the theme argument

This is the typical pattern for two-argument transitive verbs with the theme argument such as the following:

(999) *nodo-* 'lose'   *ñientile-* 'open'
       taulagi- 'get'   *belesi-* 'help'
       gazi- 'reach'   *ise-* 'see'
       dau- 'cross (the river)'   *ceze-* 'believe'
       umi- 'drink'   *ceŋele-* 'weight'
       ete- 'cost'   *säkpa b'a-* 'bring profit to'

Following are examples of sentences with direct voice:

(1000) a. *Bi* *xunazi:*   *min-e-we*   *e-ini*   *belesi.*
          me sister.1SG   me-0-ACC   NEG-3SG   help
          'My sister does not help me.'
     b. *Bi* *coŋku-we*   *ñientile:-mi.*
          me window-ACC   open.PAST-1SG
          'I opened the window.'
     c. *Bi* *aziga-wa*   *ceze:-mi.*
          me girl-ACC   believe.PAST-1SG
          'I believed the girl.'
     d. *Ño:*   *ña:-ni*   *omo*   *taŋu*   *tieze-we*
          sable   skin-3SG   one   hundred   ruble-ACC
          ete-ini.
          cost-3SG
          'Sable skin costs a hundred rubles.'

e. *Bi   puta-i   ila   kile-we   ceŋele-ini.*
   me   bag-1SG   three kilogram-ACC   weight-3SG
   'My bag weighs three kilograms.'

f. *Aziga   xoŋto   ni:-we   säkpa   b'a-ini,*
   girl   another man-ACC   profitable   get-3SG
   b'ata-ma   sita   ami-mi   to:-wo-ni
   boy-ADJ   child   father-REF fire-ACC-3SG
   ila-gi:-ni.
   kindle-REP-3SG
   'A daughter benefits other people, a son keeps up the fire in his
   father's house.'

A further list presents transitive two-argument verbs for which the transitive
character is not obvious cross-linguistically. In these the second argument often
corresponds to the semantic role of location or goal (including some kind of
mental goal), stimulus or cause of emotions. In Udihe, however, it is encoded
as a direct object.

(1001) *buji-*   'sneak up to'   *taf'äsi-*   'look after'
       agda-   'be happy about'   *biulese-*   'be proud of'
       egze-   'understand, be an expert in' *wakca-*   'hunt for'
       muñali-   'feel sorry for'   *tukti-*   'climb'
       ma:-   'scoop water out'   *za:gi-*   'revenge
                                                               upon'

       etete-   'work as'   *sebune-*   'be interested
                                                               in'

Sentence examples:

(1002) a. *Bi   anda-i   sita-wa-ni   taf'äsi-zeŋe-i.*
          me   friend-REF   son-ACC-3SG   look.after-FUT-1SG
          'I will look after my friend's child.'

      b. *Ei   a:nta   wraču-we   etete:-ni.*
         this woman   doctor-ACC   work.PAST-3SG
         'This woman worked as a doctor.'

      c. *Bi   sita-na-i   biulese-mi.*
         me · child-PL-REF   be.proud-1SG
         'I am proud of my children.'

      d. *Bi   sin-e-we   za:gi-zeŋe-i   uti*
         me   you-0-ACC   revenge-FUT-1SG   that
         diele-ni.
         because-3SG
         'I will take revenge upon you for this.'

14.3.1.2. Verbs of speech and thought

A few verbs take the Accusative direct object argument expressing the topic of speech, thought or writing ('about').

(1003) *dian-*   'tell about'   *teluŋu-*   'tell about'
     muisi-   'think about'   *xoizuŋule-*   'gossip about'
     jexe-   'sing about'   *t'osi-*   'dream about'
     oño-   'write about'

For example:

(1004) a.   *Ma:ma*   *teluŋu-si:-ni*   *od'o*   *mafa-wa.*
        grandmother   story-V-3SG   grandfather old.man-ACC
        'Grandmother is telling about a tiger.'
    b.   *Nadga:*   *getu-we*   *gazieta*   *oño-zoŋo-ni.*
        reach.PP   PL-ACC   newspaper   write-FUT-3SG
        'They will write in the newspaper about those who reached (the target).'

14.3.1.3. Verbs of appearance and creation

The following are the transitive verbs of appearance and creation:

(1005) *gada-*   'buy',   *uli-*   'sew'
     ule-   'dig'   *olokto-*   'cook'
     zawa-   'take'   *b'a-*   'find, get'
     gele-   'ask'   *uli-*   'sew'
     wo:-   'make, build, sew'

Unlike other transitive verbs, these verbs allow a Destinative construction (16.2.2) and object depictives (19.6.2.2). In the former the second argument is encoded as the Destinative object.

14.3.1.4. Verbs that govern the deverbal noun

The following verbs

(1006) *zafanda-*   'begin'   *metu-*   'finish'
     aju-   'like'   *alamasi-*   'repeat'
     ča:la-   'like, want, agree' *galu-*   'hate'
     ise-u-   'show'

are combined with the abstract deverbal nouns derived through conversion (5.2.1). Such nouns express the secondary predication in the same-subject situation (1007); in a different-subject situation the corresponding complement is expressed by the participial subordinate clause (Chapter 20).

(1007) a. *Nua-ti*   *teluŋu-we*   *alamasi-e-ti.*
      he-3PL   story-ACC   repeat-PAST-3PL
      'They repeated the story.'

   b. *Bi* *xunazi:*   *zima-wa*   *aju:-ini.*
      me sister.1SG   visit-ACC   like-3SG
      'My sister likes visits.'

   c. *Lauzi*   *ei-ni*   *ča:la* *Amerika*   *bede*
      worker   NEG-3SG   want America   like
      bagdi-we.
      live-ACC
      'The worker does not want life like in America.'

These verbs may also take a regular nominal object.

(1008) *Ei* *keje-we*   *alamasi-e-ni.*
      this word-3SG   repeat-PAST-3SG
      'He repeated this word.'

14.3.2. A/NOM, B/LAT

These intransitive verbs having the semantic role of recipient as defined above (that is, including benefactive and other goal-like valences) and also that of stimulus. They take the Lative argument.

(1009) *dian-*   'talk to'   *gualan-*   'turn into'
      soŋo-   'cry about'   *xeŋki-*   'bow to'
      isesi-   'look at'   *eteŋi-*   'glance at'
      mafala- 'marry (of a woman)'   *w'ali-*   'fight with'
      xokco- 'attack'   *sigdi b'a-*   'be angry with'

      tati- 'get accustomed to'   *tagda-*   'be angry with'

Some sentence examples are:

(1010) a. *Nua-ti*   *tati-e-ti*   *ei* *in'ei-tigi.*
      he-3PL   get.accustomed-PAST-3PL   this dog-LAT
      'They got accustomed to this dog.'

b. *Soŋo   ni:-tigi   gualaŋ-ki-ni.*
    bear   man-LAT   turn-PAST-3SG
    'The bear turned into a man.'

c. *Min-tigi   kuti   xokco:-ni.*
    me-LAT   tiger   attack.PAST-3SG
    'A tiger attacked me.'

d. *Bua-tigi   xeŋki:-ti.*
    God-LAT   pray-3PL
    'They pray to God.'

e. *Anda-tigi: e-zi   tagda.*
    friend-LAT-REF   NEG-IMP.2SG   be.angry
    'Do not be angry with your friend.'

f. *Bi   sita-tigi: mafa-la-ja.*
    me   son-LAT.1SG   man-V-IMP.2SG
    'Marry my son.'

14.3.3. A/NOM, L/LAT (ADV)

14.3.3.1. Verbs with the directional argument

These are Intransitive verbs for which a non-subject argument is expressed by a nominal in the Lative case, a Lative postpositional phrase, or an adverb, and corresponds to the semantic role of location. The argument has a directional meaning.

(1011) *ŋene-/ŋeni-*   'go to'   *tunčile-*   'jump at'
    xuli-   'go, ride to'   *tuŋgale-*   'run against'
    agda-   'moor'   *akanda-*   'lean against'
    eme-   'come'   *emegi-*   'return'
    iga:ma-   'lean against'   *tuŋkila-*   'strike oneself against'
    lagban-   'get stuck to'   *lukpe-*   'prick oneself on'
    ñu:-   'go out to'   *zima-*   'to go with a visit'
    tukti-   'climb'

For example:

(1012) a. *B'ata   kepte-tigi   akanda-mi   te-ini.*
       boy   wall-LAT   lean-INF   sit-3SG
       'The boy is sitting, leaning against the wall.'

    b. *Ni   tukti-e-ni   ei   we:-tigi?*
       who   climb-PAST-3SG   this   mountain-LAT
       'Who has climbed this mountain?'

   c. *Zaŋä-ziga*   *Moskwa-tigi*   *ŋene-zeŋe-ti.*
       boss-PL   Moscow-LAT go-FUT-3PL
       'The bosses will go to Moscow.'
   d. *Bu gugda kektime-tigi*   *agda:-mu*
       we tall   bank-LAT   moor.PAST-1PL.EX
       'We moored to the high bank.'
   e. *Tuxi*   *mo:*   *texi-tigi-ni*
       sledge   tree   stump-LAT-3SG
       tuŋkila:-ni
       run.against.PAST-3SG
       'The sledge ran against a stump'.
   f. *Bi*   *'ana-i*   *nifuga-zi-ni*   *kektime-tigi*
       me   boat-1SG   front-INST-3SG   bank-LAT
       tuŋkila-waŋ-ki-ni.
       strike-CAUS-PAST-3SG
       'My boat struck the riverbank with its prow.'
   g. *Exin-tigi:*   *zima:-mi.*
       elder.sister-LAT.REF   visit.PAST-1SG
       'I visited my elder sister.'

14.3.3.2. Location vs. goal

The semantic difference between the locational argument L/LAT taken by the verbs of this group and the benefactive-like argument B/LAT of the verbs from the previous group (14.3.2) is not always clear-cut. The formal criterion for differentiating them is reflected in the valence schemas: for the verbs discussed in this section, the second (locational) argument can be expressed by the postpositional construction or an adverb, while for the verbs in 14.3.2 it normally cannot. For the list of Lative postpositions see 10.2.1, for the list of Lative adverbs see 10.1.1. Examples of postpositional phrases as a second argument are:

(1013) a. *Zueze*   *kä:-tigi-ni*   *ŋene:-ni.*
          table   side-LAT-3SG   go.PAST-3SG
          'He came to the table.'
      b. *Uli*   *bagä:-za-tigi-ni*   *ŋene:-ni.*
          river   other-N-LAT-3SG   go.PAST-3SG
          'He went to the other side of the river.'
      c. *Čeradaka* *xo:n-tigi-ni*   *tukti:-ni.*
          attic   top-LAT-3SG   climb-3SG
          'He is climbing up to the attic.'

d. *Bi   zueze   ogdo-tigi-ni*   *iga:ma:-mi.*
    me   table   side-LAT-3SG   lean.PAST-3SG
    'I leaned against the table.'

14.3.4. A/NOM, CIR/INST

A/NOM, CIR/INST intransitive verbs take the Instrumental argument with the semantic role conventionally called the circumstance. In practice, the semantic role of this argument varies greatly.

14.3.4.1. Non-symmetrical verbs

For the following group of verbs the semantic role of the Instrumental argument is something like theme, or stimulus of emotions.

(1014) *ča:la-*   'agree with'   *diasi-*   'talk to'
       mamasala-   'marry (of a man)'   *iñe-*   'laugh at'
       azana-   'be embarrassed about' *zo:-*   'need'
       elu-   'be bored with'   *gegbisi-*   'be called'
       dekesi-   'take leave of'   *ele-*   'be full of
                                                            (food)'

       zima-   'come to see, visit'   *sauli-*   'offer (food)'
       ŋele-   'be afraid of'   *dekte-*   'separate
                                                            from, divorce'

Sentence examples:

(1015) a. *Mafa*   *sita-na-ʒi:*   *dekte:-ni.*
           old.man   son-PL-INST.REF   separate.PAST-3SG
           'The old man separated from his sons.'
       b. *Min-ʒi*   *e-ʒi*   *iñe.*
           me-INST   NEG-IMP.2SG   laugh
           'Don't laugh at me.'
       c. *Agdi-ʒi*   *ŋele-ini.*
           thunder-INST   be.afraid-3SG
           'He is afraid of thunder'
       d. *Uti ni:-ʒi*   *elu-o:-mi*   *bi.*
           that man-INST   be.bored-PAST-1SG   me
           'I am bored with that man.'
       e. *Nadä-ʒi*   *mamasa-la:-ni.*
           Nadja-INST   wife-V.PAST-3SG
           'He married Nadja.'

    f.   *Ei teu   kukpu-zi   gegbisi:-ni.*
        this all   bug-INST   call-3SG
        'These are called bugs.'
    g.   *Sita-zi-fi   dekesi-li-e-ti.*
        child-INST-REF.PL t   ake.leave-INC-PAST-3PL
        'They took leave of their children.'

The verb *wo:-* in the meaning 'become' takes a second argument that is expressed by the adjective phrase in the Instrumental, cf.:

(1016) *Bi   azig'a-i   alagdig'a-zi   wo-ini.*
       me daughter-1SG   beautiful-INST   make-3SG
       'My daughter is becoming beautiful.'

14.3.4.2. Symmetrical verbs

Verbs with an Instrumental argument may express a naturally reciprocal situation in which both participants are involved in the same way and perform the same action on each other. Note that such verbs are not formally reciprocal, that is, they do not undergo morphological reciprocalization with the suffix *-masi-* (8.2.1.1) and do not participate in the Reciprocal construction (16.1.5). Their meaning is inherently reciprocal since it is not possible to conceive of the situation they describe without the two participants acting symmetrically. Some examples of such verbs are:

(1017) *anda-ta-* 'be friends with'   *masoni-*   'fight with'
       w'ali-   'fight with'   *zuza-*   'argue with'
       b'agdi- 'meet with'   *diasi-*   'talk to'
       xefisi- 'discuss with'   *mamasa-ta-* 'live together with'
                                                   (SK 541)

In a sentence such verbs are normally in the Singular.

(1018) a. *Bi Iwana-zi   masoni-mi.*
         me Ivan-INST   fight-1SG
         'I am fighting with Ivan.'
      b. *Nua-ni   ei   b'ata-zi   w'ali-e-ni.*
         he-3SG   this   boy-INST   fight-PAST-3SG
         'He was fighting with this boy.'

Symmetrical verbs allow several alternative ways of expressing the second argument, and these are not related to voice transformations. They are described in 16.2.3.

14.3.4.3. Verbs with the instrumental argument

Another type of circumstance argument expressed by the Instrumental case has an instrumental or instrumental-like meaning, as is the case for the following verbs:

(1019) *daga-*   'burn oneself with'
     unugu-le-   'be ill with'
     neme(gi)-   'cover oneself with'
     akpisi-   'wipe oneself'
     dian-   'speak (a language)'
     sule-   'be ill with'
     zelige-si-   'play the traditional game *zelige*'

Sentence examples:

(1020) a. *Nua-ni*   *giripa-zi*   *unugu-le-ini.*
         he-3SG   flu-INST   illness-V-3SG
         'He has the flu.'
    b. *Nua-ni*   *udie*   *keje-zi-ni*   *dian-a-ini.*
         he-3SG   Udihe language-INST-3SG   speak-0-3SG
         'He speaks Udihe.'
    c. *Nua-ni*   *ketu*   *tuge*   *nemegi-e-ni*
         he-3SG   very   quick   cover-PAST-3SG
         men-e   *xula-zi:.*
         REF-0   blanket-INST.REF
         'He covered himself with his blanket very quickly.'

14.3.5. A/NOM, L/ABL (ADV)

These are Intransitive verbs with a location-type Ablative argument that expresses movement away from the location:

(1021) *tiŋme-*   'fell out'   *susa-*   'escape from'
     eu(gi)-   'go down from'   *ŋene-/ŋeni-* 'go from'

Sentence examples:

(1022) a. *Bi* *kuti-digi*   *susa:-mi.*
         me tiger-ABL   escape.PAST-1SG
         'I escaped from the tiger.'

b. *Wakca-i*   *ni:*   *mo:-digi-ni*
    hunt-PRP   man   tree-ABL-3SG
    eu-gi-e-ni.
    climb.down-REP-PAST-3SG
    'The hunter climbed down the tree.'

Examples of arguments expressed by the postpositional phrase:

(1023) a. *Zugdi*   *ogdo-digi-ni*   *ŋene-ini.*
           house   side-ABL-3SG   go-3SG
            'He is walking from the house.'
       b. *Čeradaka*   *xo:n-digi-ni*   *eu-gi:-ni.*
           attic   top-ABL-3SG   go.down-REP-3SG
            'He is going down from the attic'.

14.3.6. A/NOM, L/LOC (ADV)

Intransitive verbs with the Locative argument express different types of location.

(1024) *bagdi-*   'live in'   *etete-*   'work at'
       tigi-   'fit in'   *ŋene-*   'reach'
       i:n-   'come to, reach'   *eme-*   'come to, enter'
       nagda-   'get in, reach'   *tuge-*   'lean against'
       iga:ma-   'lean against'   *eku-*   'stay with'
       u:na-   'sit in (a boat), mount (a horse)'

Sentence examples:

(1025) a. *Wakca-i*   *ni:*   *mo:-lo*   *nagda:-ni.*
           hunt-PRP   man   tree-LOC   reach.PAST-3SG
            'The hunter got in the tree.'
       b. *Udie*   *namuŋka-da*   *namu-le*   *bagdi:-ti.*
           Udihe   Oroch-FOC   sea-LOC   live-3PL
            'Udihe and Oroch people live on the sea.'
       c. *Bi Iman-dule*   *i:ŋ-ki-mi.*
           me Iman-LOC   come-PAST-1SG
            'I came to Iman.'
       d. *Sadgi*   *mo:*   *pečka-la*   *ei-ni*   *tigi.*
           large   tree   oven-LOC   NEG-3SG   fit
            'A large log does not fit into the oven.'

    f. *Zugdi-le*   *i:ŋ-ki-ni.*
       house-LOC   come-PAST-3SG
       'He entered the house.'

Some examples of postpositional arguments are:

(1026) a. *Zueze*   *we:-le-ni*   *tuge-ini.*
          table   top-LOC-3SG   lean-3SG
          'He leaned against the table.'
      b. *Zugdi*   *ogdo-lo-ni*   *iga:ma-ini.*
          house   side-LOC-3SG   lean-3SG
          'He is leaning against the house.'
      c. *Bagä:-za*   *e:-le-ni*   *bagdi:-ni.*
          other-N   side-LOC-3SG   live-3SG
          'He lives on the other side (of the river).'

Some of these verbs, such as *bagdi-* 'live' or *etete-* 'work', also allow a Dative argument with a locational meaning, cf.:

(1027) *Bi* *enimi*   *kluba-du*   *etete-ini.*
       me   mum   club-DAT   work-3SG
       'My mum works in the club.'

The type of the argument (Dative or Locative) is determined by the noun phrase itself (see 4.2.2.5). However, for some verbs the Dative is not interchangeable with the Locative. For example, the verbs *mamasa-la-* 'marry' (of a woman), *nagda-* 'get into, reach' and *i:n-* 'enter' always require a Locative argument.

14.3.7. A/NOM, B/DAT

These are the intransitive verbs for which the benefactive or goal argument can be expressed only by the Dative:

(1028) *asa-*   'suit'
      baita b'a-   'have business with'
      omosigi-   'join'

Sentence examples are as follows.

(1029) a. | *Si-Säŋa* | *tene* | *ketu* | *ge:* | *baita* | | *bi:-ni* |
|---|---|---|---|---|---|---|
| Si San | CONT | very | bad | business | | be-3SG |

   zo:ŋku-ziga-du.
   poor-PL-DAT
   'And Si San has a very bad business with poor people.'

   b. | *Ei* | *ja:gdugu* | *min-du* | *asa-ini.* |
|---|---|---|---|
| this | glasses | me-DAT | suit-3SG |

   'These glasses suit me.'

14.3.8. A/NOM, L/PROL (ADV)

This is a rare valence pattern of intransitive verbs, with the locational argument expressed by the Prolative or the Prolative postpositional phrase or adverb:

(1030) *i:n-* 'come to, reach'   *we:li-* 'cross (a mountain)'.

Sentence examples:

(1031) a. | *Bi* | *Iwana* | *zugdi-li-ni* | | *i:ŋ-ki-mi.* |
|---|---|---|---|---|
| me | Ivan | house-PROL-3SG | | reach-PAST-1SG |

   'I reached Ivan's house.'

   b. | *Bu* | *we:-li-ni* | | *we:-li-e-mu.* |
|---|---|---|---|
| we | mountain-PROL-3SG | | mountain-V-PAST-1PL.EX |

   'We crossed the mountain to the other side.'

14.3.9. A/NOM, E/NOM

For the following two verbs the second argument functions as a secondary predicate and takes the Nominative case. These verbs are:

(1032) *bagdi-* 'grow into'   *ju:-* 'grow into'

Examples are:

(1033) a. | *Seutige* | *kuŋka* | *bagdi-zeŋe-ni.* |
|---|---|---|
| nut | cedar | grow-FUT-3SG |

   'A nut will grow into a cedar.'

   b. | *ŋič'a* | *b'ata-digi* | *sagdi* | *jegdije* |
|---|---|---|---|
| small | boy-ABL | big | hero |

   jewu-o-ni.
   grow-PAST-3SG
   'A small boy grew up into a big hero.' (SK 667)

14.4. Three-argument verbs

All three-argument verbs found in our material are transitive, that is, at least one of their arguments is a patient/theme that corresponds to the grammatical relation of the direct object (15.1.2) and is expressed by the Accusative in the direct voice construction. Consequently, these verbs permit all the voice transformations described in section 16.1. Apart from the patient, these verbs also take an agent argument that corresponds to the subject and a third argument with different semantic roles and a different formal marking.

14.4.1. A/NOM, P/ACC, B/DAT

14.4.1.1. Verbs with the benefactive argument

These are three-argument verbs of transfer of things or information with an agent, patient, and recipient that correspond to the Dative noun phrase:

(1034) *bu:-*   'give'   *ñumnisi-*   'explain'
       naŋdasi-   'owe'   *gazi-*   'bring'
       ge:ne-   'bring, take, fetch' *dalusi-*   'feed'
       to:li-   'serve (food)'
       muñali-   'feel sorry about something for somebody'

Sentence examples:

(1035) a. *Bi   sin-du   xeleba-wa   bu-o:-mi.*
           me   you-DAT   bread-ACC   give-PAST-1SG
           'I gave you (some) bread.'

       b. *Mafa   xokto-wo   aziga-ziga-du*
           old.man   road-ACC   girl-PL-DAT
           ñumnisi-e-ni.
           explain-PAST-3SG
           'The old man explained the way to the girls.'

       c. *Min-du   ila   tieze-we   naŋdasa-ini.*
           me-DAT   three   ruble-ACC   owe-3SG
           'He owes me three rubles.'

       d. *Bu   kusige-fi   omo   mafasa-du*
           we   knife-1PL.EX   one   old.man-DAT
           bu-o:-mu.
           give-PAST-1PL.EX
           'We gave our knife to an old man.'

e. *Mamaka   mafasa-du   gampa-wa   to:li:-ni.*
old.woman old.man-DAT porridge-ACC serve-3SG
'The old woman is serving porridge to the old man.'

f. *Bi   in'ei-du   zeu   xule-pte:-me-ni*
me dog-DAT   food   remain-DEC.PP-ACC-3SG
dalusi-mi.
feed-1SG
'I feed the dog with the remainder of the food.'

14.4.1.2. Verbs with the non-benefactive argument

The following verbs have the same valence pattern, however, the third argument can hardly be described as a benefactive; for the verb *muisi-* it is a copredicative element, while for the verbs *obolo-* and *wo:-* it is a kind of goal or essive.

(1036) *muisi-*   'consider'   *obo-lo-*   'divide (into parts)'
       wo:-   'turn into'

Sentence examples:

(1037) a. *Eniŋe   obo-lo:-ni   xeleba-wa   ila*
           mother   part-V.PAST-3SG   bread-ACC   three
           obo-du.
           part-DAT
           'The mother divided the bread into three pieces.'

b. *Bi Šarika-wa   in'ei aja-du   muisi-mi.*
    me Sharik-ACC   dog   good-DAT   consider-1SG
    'I consider Sharik a good dog.'

c. *Belie   tene   dogbo iŋeni ña:-wa   eilisi:-ni*
    fairy   CONT   night day   skin-ACC   process-3SG
    tege-du   uŋta-du   wo-si:-ni.
    gown-DAT   boot-DAT   make-IM-3SG
    'And the fairy processes the skins day and night and makes them into clothes and boots.' (K 30)

The third argument of the verb *muisi-* may correspond to the (substantivized) adjective. It is encoded by the Nominative form of the adjective followed by the evidential particle *gumu* (12.1.2.1). Such constructions seem to have appeared under the interfering influence of constructions with the verb *muisi-* and the finite subordinate clause followed by the evidential particle (18.3.1.2), and here are not treated as a separate valence type. Alternatively, the third

argument may be expressed by an adjective in the Dative according to the general pattern, as in (1039).

(1038) a. *Nua-ni*   *min-e-we*   *ŋel'euse*   *gumu*
           he-3SG   me-0-ACC   coward   EV
           muisi:-ni.
           think-3SG
           'He thinks of me as a coward.'

      b.   *Teu uta-wa*   *muisi:-ti*   *gulälini*   *gumu.*
           all   this-ACC   think-3PL   crazy   EV
           'Everybody thinks he is crazy.'

(1039) *Min-e-we*   *p'aga-du*   *muisi:-ni.*
       me-0-ACC   stupid-DAT   think-3SG
       'He thinks I am stupid.'

14.4.2. A/NOM, P/ACC, B/ACC

Only three verbs are found that exhibit this pattern with both non-subject arguments corresponding to the Accusative noun phrase:

(1040) *ñumnisi-*   'teach something to somebody'
       teti(-gi)-   'dress, put something (clothes) on somebody'
       (w)o:-   'make, transform something into something'
       igisi-   'make somebody grow into somebody'

Sentence examples:

(1041) a. *Ni*   *sin-e-we*   *matematika-wa ñumnisi-e-ni?*
           who   you-0-ACC   math-ACC   teach-PAST-3SG
           Si xunazi: *sin-e-we*   *matematika-wa*
           you sister.2SG   you-0-ACC   math-ACC
           ñumnisi:-ni.
           teach-3SG
           'Who has taught you math? Your sister teaches math to you.'
      b.   *Eniŋe*   *sita-i*   *teti-gi:-ni*   *tege-we*
           mother   son-REF.SS   dress-REP-3SG   gown-ACC
           xeige-we.
           trousers-ACC
           'The mother puts a gown and trousers on her son.'
      c.   *Bi sin-e-we*   *keje-we*   *ñumnisi-mi.*
           me you-0-ACC   word-ACC   teach-1SG
           'I teach you words.'

d. | *Uti* | *leme* | *kuliga* | *du-we-ni* | *o:-iti.* |
|---|---|---|---|---|
| that | lard | snake | shape-ACC-3SG | make-3PL |

'They transform that lard into the shape of a snake.' (SK 497)

The verb *tatusi-* 'teach something to somebody' exhibits a similar pattern, but the Patient argument must be expressed either by the action nominal derived through conversion of the verbal stem (5.2.1) or by the impersonal Accusative form of the Present participle.

(1042) | *A:nta-ma* | *aziga-wa* | *tatusi-e-ti* | | |
|---|---|---|---|---|
| woman-ADJ | girl- ACC | teach-PAST-3PL | | |
| *oño-wa* | *o:-i-we,* | | *ña:-wa* | *eili-we,* |
| ornament-ACC | make-PRP-ACC | | skin-ACC | process-ACC |
| *sita-wa* | *igi-si-we,* | | *siete-we* | |
| child-ACC | feed-IM-ACC | | thread-ACC | |
| *tompo-i-we.* | | | | |
| twist-PRP-ACC | | | | |

'They used to teach girls to make ornaments, to process skins, to bring up children, and to twist threads.' (SKX 300)

The pattern presented here is the only one possible for the verbs in question and thus it differs from the double object constructions described in 16.2.1, which always allow an alternative expression of the arguments.

14.4.3. A/NOM, P/ACC, B/LAT

There are three argument verbs for which the third argument has a benefactive role and is expressed by the Lative noun phrase:

(1043) | *teluŋu-si-* | 'tell' | *gun-* | 'tell, say' |
|---|---|---|---|
| *gele-* | 'ask from' | *dian-* | 'say, tell' |
| *xauntasi-* | 'ask from' | | |
| *muñali-* | 'feel sorry for something to somebody' | | |

Sentence examples:

(1044) a.	*Eniŋe*	*sita-tigi-ni*	*ŋimaŋku-we*	*teluŋu-si:-ni.*
	mother	child-LAT-3SG	tale-ACC	story-V-3SG

'The mother is telling a tale to her child.'

b. | *Ñ'ädiga* | *aziga-tigi* | *sata-wa* | *muñali:-ni.* |
|---|---|---|---|
| Nadiga | girl-LAT | candy-ACC | feel.sorry-3SG |

'Nadiga is feeling sorry for the candy to the girl.'

c.   *Kesi*   *gele-gi:-ti*   *Xutakta-tigi.*
     luck   ask-REP-3PL   Xutakta-LAT
     'They ask again for luck from (the star) Xutakta.' (SKX 306)

The second argument which in examples (1044) has the patient/theme role may also be expressed by the complement subordinate clause described in more detail in Chapter 20.

14.4.4. A/NOM, P/ACC, L/LAT (ADV)

This is a transitive verb pattern in which the third argument has a location role and is expressed by the Lative noun phrase, Lative postpositional phrase, or adverb:

(1045) *nede-*   'put'   *neugi-*   'take, carry'
       kuŋgede- 'pour'   *cudi-*   'pour'

Sentence examples are given in (1046). In (1046b) the third argument is expressed by the postpositional phrase with the Lative meaning.

(1046) a.   *Bi* *čaja-wa*   *ei*   *moxo-tigi*   *kuŋede-zeŋe-i.*
            me   tea-ACC   this   cup-LAT   pour-FUT-1SG
            'I will pour tea in this cup.'
       b.   *Bi* *moxo-wo*   *dieŋeze-tigi*   *nede:-mi.*
            me   cup-ACC   left-LAT   put.PAST-3SG
            'I put the cup to the left.'

14.4.5. A/NOM, P/ACC, CIR/INST

This is a three-argument verb pattern where the third argument is expressed by the Instrumental noun phrase having the range of circumstance or instrument-like meanings. It occurs with the following verbs.

(1047) *wakca-*   'shoot at with'   *tama-*   'pay with for'
       da:wan-   'infect with'   *xua-*   'cut with'
       gegbisi- 'name, call'   *züile-*   'saw'
       dakpi-   'cover with'   *mäundala-*   'shot (with a gun)'
       tikpene- 'nail up'   *titimasi-*   'argue with somebody
                                                     about something'

For the verb *bodo-* 'consider' the third (Instrumental) argument can be expressed by an adjective. Sentence examples are:

(1048) a.   *Kolo*   *ñ'aula-wa*   *giripa-zi*   *da:waŋ-ki-ni.*
          Kolo   child-ACC   flu-INST   infect-PAST-3SG
          'Kolo infected a child with flu.'

      b.   *Bi*   *men-e*   *sita-i*   *Maša-zi*   *gegbisi-e-mi.*
          me   REF-0   child-REF   Masha-INST   name-PAST-1SG
          'I named my child Masha.'

      c.   *Aziga-wa*   *Roza-zi*   *gegbi-e-ti.*
          girl-ACC   Roza-INST   name-PAST-3PL
          'The (new-born) girl is named Roza.'

      d.   *Zugdi*   *bua-digi*   *sagdi-zi-*   *bodo-i*   *j'eu?*
          house   place-ABL   large-INST   consider-2SG   what
          'You consider the house larger than the world, don't you?'
          (Schneider 1937: 70)

14.4.6. A/NOM, P/ACC, L/ABL (ADV)

This is a three-argument pattern in which the third argument is locational and is expressed by the Ablative noun phrase, Ablative postpositional phrase, or Ablative adverb. It occurs with the following verbs:

(1049) *agbugi-*   'pull out'   *ga:gi-*   'take out'
       zawa-   'take from'   *uisigi-*   'rescue from'

Sentence examples are in (1050). Sentence (1050c) is an example of an Ablative adverb as the third argument.

(1050) a.   *Bi*   *od'o-i*   *b'ata-wa*   *uli-digi*
          me   grandfather-1SG   boy-ACC   water-ABL
          agbugi-e-ni.
          pull.out-PAST-3SG
          'My grandfather pulled the boy out of the water.'

      b.   *Ñ'ädiga*   *min-digi*   *suese-we*   *zawa:-ni.*
          Nadiga   me-ABL   axe-ACC   take.PAST-3SG
          'Nadiga took an axe from me.'

      c.   *Bi*   *iŋme-we*   *do-nigi*   *agbugi-e-mi.*
          me   needle-ACC   inside-ABL   pull.out-PAST-1SG
          'I pulled the needle from inside.'

14.4.7. A/NOM, P/ACC, L/LOC (ADV)

A three-argument pattern in which the third argument is locational and is expressed by the Locative noun phrase, the Locative postpositional phrase, or the Locative adverb is typical of the verbs below.

(1051) *zo:mi-*   'steal from'
     xauntasi-   'ask from'
     xapti-   'complain about to'
     ti:-   'take away from'
     nede-   'put on'
     igamusi -   'lean something against'
     ga:gi-   'take from somebody/something'
     gele-   'ask something from somebody'

Sentence examples:

(1052) a.   *Iwana*   *xauntasi-e-ni*   *min-dule Petia-wa.*
        Ivan   ask-PAST-3SG   me-LOC Pete-ACC
        'Ivan asked me about Pete.'
    b.   *In'ei*   *mun-du*   *sugzä:-wa*   *zomi-e-ni.*
        dog   we-DAT   fish-ACC   steal-PAST-3SG
        'The dog stole the fish from us.'
    c.   *Nua-ni*   *meŋdele*   *zaŋä-la*   *xaptisi:-ni*
        he-3SG   always   boss-LOC   complain-3SG
        in'ei-we-ti.
        dog-ACC-3PL
        'He always complains to the boss about their dog.'
    d.   *Käsa*   *Pakula-la*   *pauza-wa*   *ti:-ni.*
        eagle   Pakula-LOC   goat-ACC   take.away-3SG
        'The eagle is taking the goat away from Pakula.'

Examples with postpositional phrases (1053) and adverbs (1054) are:

(1053) a.   *Bi*   *zueze*   *we:-le-ni* (or: *w'efe*)
        me   table   top-LOC-3SG (or: top-ACC)
        kusige-we *nede:-mi.*
        knife-ACC put.PAST-1SG
        'I put the knife on the table.'
    b.   *Caŋa*   *ge:fe*   *mo:-wo*   *igamusi:-ni.*
        wall   against   tree-ACC   lean-3SG
        'He leaned the logs against the wall.'

(1054) *J'e-we-de*   *nede-ini*   *gugda-zi.*
     what-ACC-FOC   put-3SG   tall-INST
     'He is putting something more up.'

14.4.8. A/NOM, P/ACC, E/NOM

Two verbs are found which correspond to this pattern:

(1055) *gun-* 'call' *gegbi-* 'call'

These verbs take three arguments: the agent is encoded by the Nominative, the patient (theme) is expressed by the Accusative, and the copredicative argument (conventionally referred to as essive) is also expressed by the Nominative. Sentence examples are:

(1056) a.   *Bi   ei   ñ'aula-wa   Iwana anda-ni*
           me this   child-ACC   Ivan   friend-3SG
           gun-e-mi.
           say-0-1SG
           'I call this fellow Ivan's friend.'
    b.   *Ei xoto-wo   ni: Xabarowska   gun-e-iti.*
           this city-ACC   man   Khabarovsk   say-0-3PL
           'People call this city Khabarovsk.'
    c.   *Ei bui-we   giuse gun-e-iti.*
           this animal-ACC   roe   call-0-3PL
           'They call this animal roe.'

The verbs *gun-*'call' and *gegbi-* 'call' can co-occur within one sentence, as in (1057).

(1057) *Ute   bi:-we   gegbisi:-ti   Soŋkoi   gun-e-iti.*
        that   be.PRP-ACC   call-3PL   Sonkoi   say-0-3PL
        'They call (people) like that Sonkoi.' (K 151)

Chapter 15
Grammatical relations

This chapter presents the major characteristics of Udihe syntax in terms of grammatical relations. Grammatical relations will be identified here as syntactic elements that exhibit certain grammatical properties. These properties concern, first, the form and position of the corresponding element in the clause, and second, its ability to determine the form and the position of other elements within the same clause or clause-externally. In this chapter, however, the position of the elements within the clause is not addressed. Word order in Udihe is conditioned by information structure rather than by grammatical relations and is dealt with in the chapter on information structure (Chapter 24).

Section 15.1 focuses on the most important grammatical relation, the subject. Section 15.2. deals with the direct object. Other arguments are briefly mentioned in 15.3 but are not dealt with in detail. They are described in Chapter 14 according to the valence patterns of the verbs. On the other hand, in section 15.4 we present a detailed description of clausal adjuncts according to their semantic types. Operations that alternate grammatical relations within the clause are addressed in Chapter 16.

15.1. Subject

In Udihe one noun phrase per clause can be identified as the subject. The grammatical properties that characterize the subject are summarized in 15.1.1. Section 15.1.2 deals with the subject of the Imperative clause. In section 15.1.3 we show that some subject properties are not exclusively typical of the subject but in fact characterize certain other elements, called "subjectoids". Finally, section 15.4 addresses subjectless clauses.

15.1.1. Subject properties

The Nominative case form (15.1.1.1) and the ability to trigger verbal agreement (15.1.1.2) unambiguously identify certain elements as subjects. These elements will be called the "Nominative subject" and be treated as the prototypical subject in Udihe. In subsequent sections we show that the Nominative subject is characterized by a cluster of other syntactic properties suggesting that the notion of subject is indeed relevant for Udihe grammar.

15.1.1.1. Nominative case

The following elements are encoded as the Nominative noun phrase:

(i) the first argument of the non-passive matrix clause (Chapter 14) which corresponds to the only argument of the intransitive verb or the agent argument of the transitive verb;

(ii) the same argument in the subordinate clauses (Chapters 19–21);

(iii) the pronominal patient/theme argument of the Passive constructions (16.1.1); note that the lexical patient/theme of the Passive is marked with the Accusative case and does not exhibit other subject properties (15.2.3, 16.1.1.2.2);

(iv) the only argument of most copular constructions (17.2.2).

As shown in Chapter 14, most verbs take the Nominative subject, the only exceptions being null-argument verbs (14.1). The Nominative noun phrase is absent in Agentless Passive sentences (16.1.2), in Passive sentences where the patient/theme is a lexical noun phrase (16.1.1.2.2), as well as in agentless non-passive sentences (16.2.5).

15.1.1.2. Agreement

The Nominative noun phrases listed in 15.1.1.1 all trigger agreement either on the matrix verb or on the subordinate non-finite verb within the subordinate clause. Subject agreement affixes are presented in 7.2. Although subject agreement in person is obligatory (a few exceptions are presented in 15.1.1.2.1), agreement in number may be absent (15.1.1.2.2). Non-Nominative arguments never trigger verbal agreement and are not encoded in the verbal form.

15.1.1.2.1. Suppression of agreement

Subject agreement is suppressed in the following cases:

(i) In the negative generalized postnominal relative clause (23.2.1.6.4).

(ii) In the impersonal forms of the Necessitative (7.5.3.2).

(iii) In personal infinitival sentential subject subordinate clauses (Chapters 20 and 21).

(iv) In Irrealis Conditional Converbs (7.6.2.4.2).

(v) In most Habitual clauses (7.4.2).

In cases (i) through (iii) the verb exhibits the default 3rd person Singular agreement, independent of the person and number of the Nominative noun phrase. In (iv) and (v) it is not inflected for person and number at all. The status of the Nominative noun phrase which does not trigger agreement within the clause, however, is not entirely clear. In particular it is not known whether it

exhibits all subject properties, as identified in this section. It cannot be coreferentially deleted and must be overtly present in the clause, unlike the regular Nominative subject. Yet, it can trigger reflexivization in the same way as subjects (15.1.1.4), as shown in the following example with the impersonal Necessitative.

(1058) *Bi   'ana-i   anana   aisi-gi-u-zeŋe*
       me   boat-REF   long.ago   mend-REP-PAS-FP
       bi-si-ni.
       be-PAST-3SG
       'I had to repair my boat long ago.'

15.1.1.2.2. Number agreement

Number agreement is motivated semantically rather than by formal considerations. As was discussed in 4.2.1, morphological expression of plurality is not obligatory. If the subject has multiple referents but is morphologically Singular, plurality is typically encoded by Plural agreement affixes in the verbal form, so in this case agreement in number is formally suppressed.

(1059) a.   *I:mi   e-si: dogdi,   gun-e-ini,*
            why   NEG-PAST.2SG   hear   say-0-3SG
            uti   c'asi:-we-ti.
            [that   tickle.PRP-ACC-3PL]
            'She said: why didn't you hear them tickling (her).'
       b.   *Ñamai   ba:-du   wakca-i   ni: slono-lo*
            warm   place-DAT   hunt-PRP   man   elephant-LOC
            u:ŋ-ka-si   kuti-we   wakca-iti.
            sit-PERF-PC.SS   tiger-ACC   hunt-3PL
            'In warm countries the hunters sitting on elephants hunt for tigers.'
            (Čarušin 1935: 17)
       c.   *Xai   ña   j'eu-ke   j'e-we-ni*
            again   again   what-IND   what-ACC-3SG
            b'a-ti   uti.
            find.PAST-3PL   that
            'They have found something again.'

However in some cases the verb is not marked for Plural either, cf.:

(1060) a.   *Anana   mä:usa-ti   anči   bi-si-ni.*
            earlier   gun-3PL   no   be-PAST-3SG
            'Earlier they (the hunters) had no guns.' (SK 110)

b.   *Anana*   *xuku*   *anči*   *bi-ŋie-ni*   *ilakä-zi*
     earlier   rope   no   be-IC-3SG   bast-INST
     meli   *xeke:-ti.*
     only   tie.PAST-3PL
     'Earlier there were no ropes and they used to tie (things) with bast.'
     (SK 116)

The verb normally takes Plural agreement when the subject is formally Singular but corresponds to a mass or abstract noun (1061) or has a collective interpretation (1062).

(1061) *Soŋo*   *ña:-ni*   *iŋakta-ni*   *wanimi-ŋku.*
       bear   skin-3SG   fur-3SG   long-PL
       'The fur of the bear skin is long.'

(1062) a.   *Lusa*   *sagdi*   *xoton-du*   *bagdi:-ti.*
            Russian   big   city-DAT   live-3PL
            'Russians live in big cities.'
       b.   *Mo:*   *abdä:-ni*   *kogomoi*   *b'a-iti.*
            tree   leaf-3SG   thirsty   get-3PL
            'The leaves of the trees are thirsty.'
       c.   *Gele:-ni*   *belesi-le:-ti*   *činda-wa.*
            ask.PAST-3SG   help-PURP-3PL   bird-ACC
            'He called birds so that they help.' (SKX 76)
       d.   *Uti*   *xeŋki-ŋku-du*   *Kimo ŋko*   *se:-ni*
            that   pray-N-DAT   Kimongko   clan-3SG
            xe ŋki-s-e-ti.
            pray-IM-PAST-3PL
            'The clan Kimongko used to pray at that praying place.' (SK 838)

On the other hand, when the subject is morphologically marked for plurality with the suffix *-ziga*, the verb typically takes Plural agreement (1063), although this rule is not strict either (1064).

(1063) a.   *Tuge-zi*   *tukä-iti*   *in'ei-ziga.*
            fast-INST   run-3PL   dog-PL
            'The dogs are running fast.'
       b.   *Ñ'aula-ziga*   *agda:-ti.*
            child-PL   get.happy.PAST-3PL
            The children became happy.'

(1064) *Sita-u*   *ña:-wa-ni*   *daga-ili*   *zube*   *emende-ziga.*
       son-1PL.EX   skin-ACC-3SG   burn-3SG   two   which-PL
       'Two witches have burnt our son's skin.'

As was discussed in 13.3, the head of the quantified noun phrase is normally morphologically Singular. When the quantified noun phrase bears the subject role, the verb may be either in the Singular or in the Plural. This is shown in (1066a) and (1066b) taken from the same text, as well as in (1067a) and (1067b).

(1065) *Egdi   ni: eme:-ni.*
       many man   come.PAST-3SG
       'A lot of people came.'

(1066) a. *Nada   ŋeŋue   eme:-ti.*
           seven   ogre   come.PAST-3PL
           'Seven ogres came.' (K 116)
      b. *Nada   ŋeŋue   eme-i-we-ni   düisi-mi..*
           seven   ogre   come-PRP-ACC-3SG   here-1SG
           'I hear seven ogres coming.' (K 115)

(1067) a. *W'ali-li-e-ti   zu: mafa.*
           fight-INC-PAST-3PL   two   bear
           'Two bears started fighting.'
      b. *Zu: mafa   eme:-ni.*
           two   bear   come.PAST-3SG
           'Two bears came.'

15.1.1.3. Control of switch-reference

Most importantly, the notion of subject lies at the center of the switch-reference system which is addressed at greater length in 22.5 and illustrated in the chapters on subordinate clauses (Chapters 19–21). In conformity with this system, the non-finite verbs (participles and converbs) that form the subordinate clauses of different types carry personal affixes of one of two types: the so-called same-subject and different-subject. The former indicate the coreference of the subjects of the superordinate and the subordinate clause, while the latter indicates the lack of such coreference. The Nominative subject, as identified in 15.1.1.1 triggers the same-subject switch-reference affixes (examples can be found in 22.5), while other grammatical relations fail to do so. Example (1068) indicates that the subject of the copular construction controls the same-subject switch-reference markers (same-subject Perfective Converb):

(1068) *Oñ'o-si   aziga   o-du   bi:-ni.*
       [write.PERF-PC.SS]   girl   this-DAT   be-3SG
       'The girl who finished writing is here.'

15.1.1.4. Refexivization control

The Nominative subject controls reflexivization in the following two cases: first, Reflexive pronouns in different syntactic roles (22.3.1.1), and second, the Reflexive Possessive affixes (22.3.1.2) which indicate that the possessor within the corresponding noun phrase is coreferential with the subject. Grammatical relations other than the subject do not control reflexivization. See 22.3.3 for syntactic detail.

15.1.1.5. Impersonal forms of participles

When the Nominative subject is relativized, the active participle within the relative clause appears in its impersonal form (19.1.1, 19.1.2). On the other hand, when other syntactic positions are relativized, the participle takes the personal affix that refers to the subject of the relative clause.

15.1.1.6. Control of infinitival clauses

The Nominative subject determines particular non-finite forms in certain subordinate clauses (other than switch-reference markers). In particular, it controls the infinitival complement clause (Chapter 20) and the infinitival adverbial clause (Chapter 21).

15.1.1.6.1. Controllers of the infinitival clause

The infinitival clause, when its subject is referential, cannot be controlled by grammatical relations other than the subject, as illustrated below for the direct object (1069a) and the indirect object (1069b).

(1069) a. *Eme-mi*   *ise:-ni*   *Kanda mafa.*
            [come-INF]   see.PAST-3SG   Kanda old.man
            '$\emptyset_{i/*j}$ Having come she$_i$ saw the old man Kanda$_j$.'
      b. *Eme-mi*   *b'ata-du*   *kusige-we*
            [come-INF]   boy-DAT   knife-ACC
            bu-o:-ni.
            give-PAST-3SG
            '$\emptyset_{i/*j}$ Having come she$_i$ gave the knife to the boy$_j$.'

Examples (1070) demonstrate the infinitival advérbial clause controlled by the subject of the Passive, which in this case is coreferentially deleted (in the glosses this is marked by a zero).

(1070) a. *Maŋga*　　　*bi-mi*　　　　　*i:mi*　　*likp-u-i*
　　　　　　[strong　　　be-INF Ø]　　　why　　close-PAS-2SG
　　　　　　sama-du?
　　　　　　shaman-DAT
　　　　　　'Being strong, why can you be closed by the shaman? (to a hole)'
　　　　　　(K 124)
　　　 b. *Maŋga*　　　*bi-mi*　　　　*bua-du*　　　*i:mi*　　*wu:-i?*
　　　　　　[strong　　　be-INF Ø]　　God-DAT　　why　　kill.PAS-2SG
　　　　　　'Being strong, why can you be killed by God?' (K 125)
　　　 c. *Wakca-mi*　　　　　*wa-w-o:-ni.*
　　　　　　hunt-INF　　　　　　kill-PAS-PAST-3SG
　　　　　　'He was killed while hunting.'

When the agent of the subordinate infinitival clause does not correspond to the matrix clause subject, various strategies apply to avoid ill-formed structures. One option is the causativization of the subordinate clause.

(1071) *Susana*　　*zug-tigi*　　　　*i:-wen-e-mi*　　　　　　*tu:*
　　　　[Susan　　house-LAT　　　enter-CAUS-0-INF]　　　all
　　　　xauntasi-li-e-ti.
　　　　ask-INC-PAST-3PL
　　　　'As soon as they let Susan into the house, everybody started asking him (sic).'

15.1.1.6.2. Different-subject infinitival clauses

Certain types of infinitival clauses may be controlled by the Dative experiencer noun phrase (20.1.1.3) and the Accusative causee in the causative constructions, which is an argument for their partial subjecthood (15.1.3). Further, infinitival clauses are allowed when the subjects of the two clauses bear a relationship of inalienable possession to each other. If the superordinate clause subject denotes a body part of the subject participant of the infinitival clause, a coreferential relationship between two subjects obviously does not hold, but the sentences are grammatical:

(1072) a. *Ketu*　　　*egdi-me*　　　*ini-mi*　　　*emugde*
　　　　　　[Ø very　　much-ACC　　laugh-INF]　　stomach
　　　　　　uni:-ni.
　　　　　　ache-3SG
　　　　　　'His stomach is aching from laughing so much.'
　　　 b. *Pakula*　　*maŋga simpi-mi*　　*iŋamukta-ni*　　*eji:-ni.*
　　　　　　[Pakula　　strong cough-INF]　　tear-3SG　　　flow-3SG
　　　　　　'Pakula was coughing so much that tears appeared.'

c. *Ei*   *banza-ma*   *korovati-le*   *ŋua-mi*
[Ø this   board-ADJ   bed-LOC   sleep-INF]
ni: *beje-ni*   *teu*   *uni:.*
man   body-3SG   all   hurt.PRP
'When sleeping on this bed made of boards, the man's whole body is hurting.'

Finally, the infinitival clause may be interpreted semantically as generic and lack a subject entirely.

(1073) a. *Mafa-wa*   *wakča-mi*   *ni:-we*
[Ø bear-ACC   hunt-INF]   man-ACC
čof'osi-e-ni.
wound-PAST-3SG
'When (people) were hunting for a bear, he wounded one man.' (SKX 310)

b. *Diga-mi*   *e-u-i*   *mala.*
eat-INF   NEG-PAS-PRP   finish
'When one eats (it), it does not finish.' (SK 978)

c. *Mo:-wo*   *mo-lo-logo-mi*   *tugbu-se.*
[tree-ACC   tree-V-PURP-SS]   cut-PP.PAS
'(Trees) were cut down to prepare wood.'

d. *Igdu-fi*   *wende-mi*   *mo:*   *bagdi-ze.*
comb-REF.PL   throw-INF   tree   grow-HORT
'When you throw the comb, trees will grow.'

15.1.1.7. Other control structures

The Nominative subject controls certain participial complement clauses (the so-called subject-control clauses (20.2.3.1)), as well as certain participial adverbial clauses (21.3.2.8).

15.1.1.8. Depictives

As demonstrated in 19.6, the Nominative subject controls secondary predicates (depictives). This property is also shared by some direct objects, but it is not typical of lower grammatical relations.

15.1.1.9. Coreferential deletion

The Nominative subject is a regular target of deletion under coreference (22.2.1). In particular, this concerns coreferential deletion across conjoined clauses, which is a property exclusively typical of subjects in Udihe (22.2.7.2).

15.1.1.10. Non-adjacent modifier

The subject together with the direct object seem to be the only grammatical relations that participate in certain constructions where an attributive modifier appears discontinuously with respect to its head: quantifier float (24.2.1.2.2), a non-adjacent relative clause (19.3) and adjectival determiner (24.2.1.2.1).

15.1.2. Imperative subject

The Imperative subject (the addressee of the Imperative clause) behaves in the same way as the ordinary Nominative subject.

15.1.2.1. Overt Imperative subject

In the most cases, the Imperative clause does not contain an overt subject constituent. However, the Imperative subject can be overtly present in the clause, especially when it is emphasized. So the rules for the overt presence of the Imperative subject do not basically differ from those for the non-Imperative subject, which is also normally omitted and is overtly present only when in focus (22.2.1). When the Imperative subject is overtly present, it is encoded by the Nominative noun phrase. Most frequently, its position is immediately after the Imperative verb (1074), but it can also be located clause-initially (1075).

(1074) a. *Bu-je* *si* *uta-wa.*
give-IMP.2SG you that-ACC
'Give it.'

b. *Utemi* *min-tigi* *mafa-la-i* *si.*
therefore me-LAT man-V-IMP.2SG you
'Therefore, marry me.'

c. *Pigde* *ñuxan-a-i-ze* *si,*
inside penetrate-0-IMP.2SG-HORT you
ixompo.
bird.cherry.tree
'Go inside, bird cherry tree.' (SKX 160)

(1075) a.   *Si*   *boxoso*   *eme-je.*
            you   humpback   come-IMP.2SG
            'You, humpback, come in.'
      b.   *Si*   *min-tigi*   *ñoxoli* *gakpa-ja*   *bi*
            you   me-LAT   first   shoot-IMP.2SG   [me
            ise-lege-i   *si*   *ono-do*
            see-PURP-1SG   [you   how-IND
            gakpa-i-wa-i.
            shoot-PRP-ACC-2SG]]
            'Shoot at me first, so I can see how you shoot.' (K 152)

15.1.2.2. Properties of the Imperative subject

The Imperative subject triggers agreement on the Imperative verb (2nd person
Singular or Plural) and seems to be characterized by all the subject properties
described in 15.1.1. The most important are illustrated below. Examples (1076)
demonstrates that it controls the infinitival subordinate clause; (1077) shows
that it triggers same-subject switch-reference markers; in (1078) we illustrate
that the Imperative subject controls coreferential deletion across the conjoint
clause, while (1079) presents reflexivization.

(1076) a.   *Zima*   *bi-mi-de*   *i:-je.*
            [guest   be-INF-FOC]   enter-IMP.2SG
            'If you are a guest, come in.'
      b.   *Ono*   *ča:la-m(i)*   *ono*   *gazi-ja*   *si.*
            [how   want-INF]   how   carry-IMP.2SG   you
            'Carry (it) in a way you want.' (K 185)

(1077) a.   *Zeu-we*   *diga-lie*   *teu-teu*
            [food-ACC   eat-CC.SS.PL]   quite-quite
            diga-ja-u.
            eat-IMP-2PL
            'If you eat food, eat it in silence.'
      b.   *Min-du*   *oloxi*   *bu-je*   *si*
            me-DAT   squirrel   give-IMP.2SG   [you
            tiŋeni   *wa:-mi.*
            yesterday   kill.PP-SS]
            'Give me the squirrel you killed yesterday.'
      c.   *Sa-laga-mi*   *taŋi-je*   *a-wa.*
            [learn-PURP-SS]   read-IMP.2SG   this-ACC
            'Read this in order to learn it.'

(1078) a.   *In'ei-we*   *e-zi*   *tuŋkala*
            dog-ACC   NEG-IMP.2SG   touch
            iktemel-u-i.
            bite-PAS-2SG
            'Don't touch the dog, it will bite you.'

       b.   *Min-tigi e-zi*   *pilaxi*   *min-du*
            me-LAT NEG-IMP.2SG   tease   me-DAT
            koŋk-u-i.
            beat-PAS-2SG
            'Don't tease me, I will beat you.'

(1079) a.   *Unta-i-de*   *men-e*   *bei-zi:*
            boot-REF-FOC   REF-0   body-INSTR.REF
            e-zi   *wagi.*
            NEG-IMP.2SG   dry
            'Don't dry your boots yourself.' (K 109)

       b.   *Gagda-na-m(i)*   *galakta-na-i.*
            another-DEST-REF   seek-DIR-IMP.2SG
            'Go to seek a match (a wife) for yourself.'

       c.   *Sul'ai*   *tege-fi*   *zuesi-nde-ze-fi.*
            fox   gown-REF.PL   swap-SEM-SUBJ-1PL.IN
            'Fox, let us swap our clothes.' (K 164)

15.1.3. Subjectoids

Although no other syntactic units exhibit exactly the same cluster of properties as the Nominative subject, it is important to note that some of the properties addressed in 15.1.1 are shared by other elements. These elements will be called "subjectoids". Subjectoids do not take the Nominative case and do not trigger verbal agreement. However, they participate in certain (control) processes that are also typical of the subject. The following subjectoids share some subject properties: the Dative experiencer (15.1.3.1) and the Accusative noun phrase that corresponds to the causee argument of the causative constructions (15.1.3.2). We do not have enough material to address the behavior of these elements with respect to all subject properties, but each of subjectoids is characterized by at least one property, as opposed to lower grammatical relations.

15.1.3.1. Dative experiencer

The Dative experiencer is present in certain copular constructions (17.2.3) and demonstrates some subject properties. It controls the Infinitival complement

clause, as discussed in 20.1.1.3 (the so-called experiencer-controlled clause). Further, the Dative experiencer triggers the same-subject switch-reference affixes. This is illustrated in the following example, where the participle in the adverbial embedded clause is marked by the agreement morpheme -*i* ambiguous between the same-subject and the 2nd person Singular interpretation. The lack of the Accusative case marking on the embedded participle rather indicates that we deal here with the same-subject relation (cf. 22.5.2.2).

(1080) *Sin-du*   *ge:*   *bi-ze*   *e-si:*   *bu-gi.*
     you-DAT   bad   be-SUBJ   [NEG-PP.2SG give-REP]
     'You will be ill unless you give it back.'

On the other hand, the Dative experiencer does not trigger verbal agreement, the impersonal participial forms when relativized or the other types of same-subject subordinate clauses mentioned in 15.1.1, and cannot be omitted under coreference. Unfortunately, we do not have material to show whether it can be an antecedent of a reflexive element.

15.1.3.2. The Accusative causee

The causee argument in the transitive Causative construction can be expressed either by the Accusative noun phrase or by the Dative noun phrase (16.1.4.3), and in intransitive Causative constructions only by the Accusative noun phrase (16.1.4.2).

   The Accusative causee has several grammatical properties typical of subjects. First, it controls the infinitival clause as shown by the following example.

(1081) *Dami-we*   *damisi-mi*   *ni:-we*   *ede-ne-weni:-ni.*
     [tobacco-ACC   smoke-INF]   man-ACC   weak-V-CAUS-3SG
     'Smoking tobacco makes a man weak.'

Second, like subjects, the Accusative causee is easily deleted under coreference with a previously mentioned element.

(1082) a.   *Ogdö*   *do-lo-ni*   *ŋua-wan-za-fi.*
        coffin   inside-LOC-3SG   sleep-CAUS-SUBJ-1PL.IN
        'We will put him to sleep in a coffin.' (K 190)

b. *Yegdige*   *ba:*   *xo:n-dule-ni*   *ule:-ni*
   hero   place   top-LOC-3SG   dig.PAST-3SG
   agdu,   *uta-la*   *ŋua-waŋ-ki-ni.*
   hole   that-LOC   sleep-CAUS-PAST-3SG
   'The hero dug a hole in the forest and then put them to sleep.'
   (K 132)

Third, it can control the coreferential null across the conjoint clause.

(1083) a. *Susa-gi-ze-mi*   *bi,*   *lä*
           escape-REP-SUBJ-1SG   me   very
           uktu-wen-zeŋe   *tigde.*
           wet-CAUS-FUT   rain
           'I must escape, (otherwise) the rain will make me wet through.'
    b. *Nada-ma*   *ŋeni*   *nada-ma*   *dogbo-ni*
        seven-ACC   day   seven-ACC   night-3SG
        sikisi-e-ni.   *mamasa-i,*   *siki-e-k,*
        wash-PAST-3SG   wife-REF   wash-PAST-EXPR
        aja-zi   *teti-gi-wene:-k.*
        good-INST   dress-REP-CAUS-PAST-EXPR
        'He was washing his wife for seven days and seven nights, he
        washed her and dressed her well.'

With respect to reflexivization, our evidence is controversial. Example (1084a)
shows the null causee which corresponds to the coreferentially deleted
Accusative noun phrase. This argument is shared by several conjoined
causative verbs, some of which are originally intransitive and therefore allow
only the Accusative causee (16.1.4.2.1), these are *teti-gi-wen-'e* 'caused to put
on', *zawa-gi-wan-'e* 'caused to take', *iktemele-gi-wen-e:-ni* 'caused to bite',
and *te-gi-weŋ-ki-ni* 'caused to sit'. The possessive affixes on the words
oño-wo-ni 'her kerchief' and *dami-ŋi-we-ni* 'her pipe', although they refer to
the causee argument, are not reflexive. Moreover, in (1084b) the reflexive
element on *na:-ŋi-la-i* 'on on your land' can refer only to the (imperative)
subject but not to the causee.

(1084) a. *Wo-zoŋo-wo-ni*   *teti-wen-'e,*   *seuzine-le*
           [sew-FUT-ACC-3SG]   dress-CAUS-PERF   kerchief-FOC
           oño-wo-ni   *zawa-gi-wan-'e,*
           embroid-ACC-3SG   take-REP-CAUS-PERF
           dami-ŋi-we-ni   *iktemele-gi-wen-e:-ni,*
           pipe-AL-ACC-3SG   bite-REP-CAUS-PAST-3SG
           doŋdom   *te:-gi-weŋ-ki-ni.*
           straight   sit-REP-CAUS-PAST-3SG

'He made her take what she will sew, gave her a kerchief to embroider, made her take a pipe with her teeth, and seated her straight.' (K 105)

b. *Ma:ma,*   *min-e-we*   *doh-won-o-jo*
    grandmother   me-0-ACC   perch-CAUS-0-IMP.2SG
    na:-ŋi-la-i.
    land-AL-LOC-REF
    'Grandmother, let me perch on your land.' (SKX 326)

However, in the following examples the null Accusative causee does control the reflexive pronouns *me-mi* and *men-tigi*.

(1085) a. *Amba-n'a-si*   *bagdi:*   *ni:-we*
          evil.spirit-V.PERF-PC.SS   live.PRP   man-ACC
          kese-u-li-li-e-ni,   *me-mi*
          suffer-CAUS-INC-INC-PAST-3SG   REF-ACC
          wa-wan-a-ini.
          kill-CAUS-0-3SG
          'Having turned into an evil spirit he used to torture living people, he forced them to kill themselves.' (SK 203)

b. *Tada-zi*   *men-tigi*   *gakpa-wan-a-ini*   *tiŋe*
    arrow-INST   REF-LAT   shoot-CAUS-0-3SG   chest
    t'afa.
    straight
    'He forces them to shoot at themselves straight in the chest.' (SKX 406)

It looks like both options are equally available.

On the other hand, the Accusative causee does not seem to have other subject properties, and behaves syntactically like a direct object (15.2). In particular, it can trigger passivization (16.1.4.4) and does not control switch-reference, cf.:

(1086) *Diga-la:-ni*   *čaja*   *umi-wen-e-i.*
       [Ø eat-PURP-3SG]   tea   drink-CAUS-0-PRP
       'She made him drink tea so that he eats.'

15.1.3.3. The Dative causee

The Dative causee does not exhibit any subject properties. In particular, it does not control the infinitival clause (1087a), the coreferential null, and reflexivization (1087b).

(1087) a.   *Eme-mi*   *bi*   *Iwana-du*   *abuga-tigi*
          [come-INF]   me   Ivan-DAT   father-LAT.REF
          oño-wo   *oño-woŋ-ki-mi.*
          letter-ACC   write-CAUS-PAST-1SG
          '$\emptyset_{i \cdot j \cdot k}$ Having come, I$_i$ made Ivan$_j$ write a letter to his father$_k$.'

      b.   *Men-e*   *j'e-le*   *uni*   *bi-si-ni*   *uta-la*
          REF-0   what-LOC   hurt   be-PAST-3SG   that-LOC
          ni:-du   *begdi-le-ni*   *ŋala-la-ni*
          man-DAT   leg-LOC-3SG   arm-LOC-3SG
          auli-waŋ-ki-ni.
          swell-CAUS-PAST-3SG
          'He made a leg or an arm of a man to swell at the (same place)
          where he himself felt pain.' (SK 955)

15.1.4. Subjectless clauses

Although the notion of subject plays an important role in the Udihe grammar, subjectless clauses are possible. The absence of an overt subject in such a clause does not follow from coreferential deletion (as the one addressed in 22.2.1), but is non-referential.

15.1.4.1. Semantically-driven absence of subject

An overt subject is absent in the subjectless non-copular (14.1.1) and copular (17.2.1) clauses with a null-argument verb. More detail can be found in the corresponding sections. The subjectless clauses normally describe natural environmental conditions. Matrix clauses with subject-control aspectual or modal verbs (20.2.1) are syntactically subjectless if the subordinate clause is subjectless for semantic reasons.

(1088) a.   *Ba:-la*   *ima:-na:n-zi*   *wadi-e-ni.*
          [place-LOC   snow-V.PP-INST.SS]   stop-PAST-3SG
          'After snowing outside it stopped (snowing).'

      b.   *Ima:-na-la:-mi*   *nixe-ini.*
          [snow-V-PURP-SS]   do-3SG
          'It is going to snow.'

      c.   *Tigde-le:-mi*   *nixe-ini.*
          [rain-PURP-SS]   do-3SG
          'It is going to rain'

15.1.4.2. Voice-related absence of subject

The surface subject is absent from some voice-driven constructions, namely, the Agentless Passive (16.1.2), the regular Passive with the nominal patient/theme argument (16.1.1.2.2), and the active agentless construction (16.2.5), including the impersonal subordinate infinitival clause (20.1.1.1). An example of a subjectless embedded clause formed with an impersonal participle is cited in 7.10.1.1.3. In all these clauses, the agent has a generic or indefinite interpretation, which conditions the suppression of the grammatical subject. They will be referred to as impersonal. The impersonal clauses differ from the semantically subjectless clauses (15.1.4.1). In impersonal sentences the subject participant, although suppressed from the surface clause structure and sometimes from the argument structure of the predicate, is present in the conceptual representation of the event. Therefore it can trigger certain syntactic processes. The examples below illustrate the Agentless construction. The "impersonal" null subject controls the reflexive elements, which in this case also receive a generic or indefinite interpretation (1089) and the same-subject switch-reference markers (1090).

(1089) a.   *Men-e*   *'apti:*   *käu*   *kämbu-wasi:-ti.*
            REF-0   food.REF   all   sacrifice-DIV-3PL
            uli-we   *umile-mi*   *men-e*
            [water-ACC   drink-INF]   REF-0
            naŋi-zi: *soli:-ti.*
            earth-INST.REF   mix-3PL
            'They sacrifice all their food. When drinking water, they mix it with
            their own earth.' (K 123)

    b.   *Sita-fai*   *tatuṣi-e-ti*   *ŋič'a-digi.*
            child-REF.PL   teach-PAST-3PL   small-ABL
            'They used to teach children from childhood.' (SKX 300)

(1090) *Solog'o-si*   *umi:-ti.*
       [stir.PERF-PC.SS]   drink-3PL
       'After stirring it, they drink it.' (K 123)

The following examples demonstrate Agentless Passive clauses where the impersonal subject has the generic reading (1091) or the indefinite reading (1092), but controls the same-subject subordinate clause.

(1091) a.   *Soloixi*   *ugda-zi*   *solo-mi*   *gäun-d-u-i.*
            [upstream   boat-INST   float-INF]   pole-V-PAS-PRP
            'When going upstream in the boat, one uses poles.'

b. *Xoŋto*   *ba:-tigi*   *ŋene-mi*
   [other   place-LAT   go-INF]
   kämbu-was-u-ji.
   sacrifice-DIV-PAS-PRP
   'One has to make a sacrifice going to another place.' (K 123)

c. *Aisi-gi-mi*   *e-u-zeŋe*   *mute*   *uta-wa.*
   [mend-REP-INF]   NEG-PAS-FT   can   that-ACC
   'It is not possible to mend it.'

d. *Ei-mi*   *santi-si*   *e-u*   *ji:*   *zuk-tigi.*
   [NEG-INF   fist-V]   NEG-PAS   enter   house-LAT
   'One shouldn't enter the house without knocking.'

e. *ñoŋo-wo*   *ñoŋo-ŋisi-ge-si*   *egdi-we-de*
   [glue-ACC   glue-V-PERF-PC.SS]   much-ACC-FOC
   mo:-wo   *tukti-mi*   *tukti-mi*   *ñoŋo-u-ji.*
   tree-ACC   climb-INF   climb-INF   glue-PAS-PRP
   'Having made a lot of glue, one should climb a tree and smear (it
   with the glue).' (SKX 258)

f. *Xa:-mula*   *bi-mi*   *ono*   *mamasa-la-u-ji?*
   [sibling-N   be-INF]   how   wife-V-PAS-PRP
   'How can you, being siblings, get married?' (SKX 310)

(1092) a. *Zugdi-we*   *xeline-mi*   *wo-so.*
          house-ACC   [hurry-INF]   make-PP.PAS
          'The house was built in a hurry.'

      b. *Tege-we*   *uli-mi*   *e-u-se*   *metu.*
         [gown-ACC   sew-INF]   NEG-PAS-PP   finish
         'They haven't finished sewing the gown.'

In the following sentence the main clause contains an impersonal expression
whose "subject" controls the same-subject switch reference marker on the
infinitive and the reflexive element within the subordinate complement clause.

(1093) *Me-mi*   *ge:*   *aga-la-wan-a-mi.*
       [REF-ACC]   bad   [deception-V-CAUS-0-INF]
       'It is bad to let (other people) deceive you.'

15.2. Direct object

There is some syntactic evidence suggesting that the notion of the direct object
is important in Udihe grammar. The element that can be identified as the direct
object is the noun phrase that is marked by the Accusative case and
corresponds to:

(i) the second (patient/theme) argument of the transitive verb in the non-passive matrix and subordinate clauses (the transitive verbs which take the direct object argument are addressed in Chapter 14);

(ii) the patient/theme in Agentless Passive transitive constructions (16.1.2);

(iii) the lexical noun phrase that corresponds to the patient/theme in Passive constructions (16.1.1.2.2).

(iv) the causee argument of intransitive and transitive causatives (16.1.4).

The reflexive direct object is morphologically marked with the Nominative case (22.3.2), but syntactically it behaves in the same way as the Accusative object.

Udihe exhibits double object constructions in which more than one argument is encoded as the Accusative noun phrase (16.2.1). These constructions are not very frequent, and the grammatical relations borne by their elements are basically unstudied. Note however that both objects in such constructions undergo passivization, as is suggested by the data from the Causative double object constructions (16.1.3.4). In this section we will deal only with single object sentences.

15.2.1. Object properties

The direct object is not characterized by the subject properties as identified in 15.1.1. It does not control reflexivization, switch-reference, or the infinitival subordinate clauses, and never triggers verbal agreement. However, it exhibits certain syntactic properties that differentiate it from lower grammatical relations (indirect and oblique objects and adjuncts).

15.2.1.1. Coreferential deletion

Like the subject (though less regularly), the direct object can be coreferentially deleted under certain discourse conditions. In 22.2.2 examples of the coreferential deletion of the direct object are presented. On the other hand, direct objects, unlike subjects, do not control coreferential deletion across conjoint clauses.

15.2.1.2. Passivization

The direct object is the only grammatical relation that can passivize (on possible exceptions see 16.1.1.3). In the Passive constructions (16.1.1) the correspondence between the agent and the subject is violated. The pronominal patient (that is, the direct object of the corresponding active construction) is promoted to the subject, while the lexical patient argument fails to do this. Importantly, only the direct object of the active construction can passivize, while, for example, the indirect object and lower grammatical relations cannot.

In 16.1.4.4 examples are presented for the passivization of the Accusative causee argument.

15.2.1.3. Depictives

The direct object, as opposed to the other grammatical relations, but together with the subject, can control certain depictives, that is, secondary predicates (see 19.6).

15.2.1.4. Control structures

The direct object is coreferential with the subject of subordinate clauses of certain types, the so-called "object-control" clauses (20.2.2.1 and 20.2.3.2).

15.2.1.5. Attributive case-agreement

The direct object and subject are the only grammatical relations that trigger attributive case-agreement in the quantified noun phrase (13.3.6) and the relative clause (19.2.3).

15.2.2. Destinative object

Apart from the Accusative direct object, characterized by the syntactic properties described in 15.2.1, the patient/theme argument may be encoded by the destinative object (16.2.2). The destinative object corresponds to a possessive noun phrase whose head is marked by the Destinative case and the possessive affix. The head noun denotes an object designated for a particular person (benefactive) or purpose, which, in its turn, can be encoded by the modifier noun and is cross-referenced by the personal affix.

Similarly to the regular direct object (19.6), the destinative object can control depictives, as illustrated in (1094).

(1094) a.   *Sul'ai*   *tege-ne-ni*   *wo:-jo*
           fox   gown-DEST-3SG   make-IMP.2SG
           uligdig'a-zi.
           beautiful-INST
           'Make a beautiful gown for the fox.' (K 160)

b. *Sita-ziga*   *tege-ne-ti*   *wo:-ti*
    child-PL   gown-DEST-3PL   make.PAST-3PL
    uligdig'a-zi-de.
    beautiful-INST-FOC
    'They made beautiful gown for the children.'

However, in its other properties it differs from the regular object. It cannot passivize or be coreferentially deleted across conjoint clauses, does not control subordinate clauses, and does not trigger attributive case-agreement. This suggests that the destinative object may have a special grammatical status, differing from that of the regular direct object.

15.2.3. Direct object in Passive constructions

As shown in 16.1.1, in the Personal Passive clauses the element that corresponds to the direct object of the active counterpart construction, normally, the patient or theme, is encoded by the Accusative noun phrase, if it is a noun (not a personal pronoun). In a similar fashion, the patient/theme argument of the transitive Agentless Passive is marked for the Accusative case (16.1.2). The crucial question is whether these elements can be identified as subjects. The syntactic tests, described in section 15.1.1, show that the Accusative noun phrases in passive constructions do not exhibit the cluster of subject properties typical of the Nominative subject. In particular, they do not control reflexivization, cf. (1095a) and (1095b); do not trigger same-subject switch reference markers (1096); do not control the coreferential null across the conjoined clause (1097), and do not participate in other control structures.

(1095) a. *Omo*   *ñ'aula-wa*   *bue-ni*   *mäunda-zi-ni*
       one   boy-ACC   he-3SG   gun-INST-3SG
       wa-sa.
       kill-PP.PAS
       'One boy was killed from his own gun.'
    b. **Omo*   *ñ'aula-wa*   *bue-ni*   *mäunda-zi:*
       one   boy-ACC   he-3SG   gun-INST.REF
       wa-sa.
       kill-PP.PAS
       'One boy was killed from his own gun.'

(1096)   *Uti ni:-we*   *sa-wu-i*   *ba:-za*
       that man-ACC   know-PAS-2SG   [place-N
       ge-le-ni   *e-si-me-ni*   *xuli.*
       surface-LOC-3SG   NEG-PP-ACC-3SG   go]
       'You can recognize the man who (never) went to the forest.'

(1097) a.   *Petro-wa*   *Iwana-du*   *koŋko-wo:-ni*   *Petro*
          Peter-ACC   Ivan-DAT   beat-PAS.PAST-3SG   Peter
          ŋene:-ni.
          go.PAST-3SG
          'Peter_i was beaten by Ivan_j and he_{i/*j} left'.

b.   **Petro-wa*   *Iwana-du*   *koŋko-wo:-ni*
          Peter-ACC   Ivan-DAT   beat-PAS.PAST-3SG   ∅
          ŋene:-ni.
          go.PAST-3SG
          'Peter_i was beaten by Ivan_j and he_{i/*j} left'.

15.2.4. Summary of grammatical properties

The comparative table 14 illustrates the syntactic properties of the higher grammatical relations in Udihe; the question mark indicates lacunae in our material. The table shows that, as expected, the most syntactically active element is the subject. The direct object and certain subject-like elements (subjectoids) share some of the subject properties, while other grammatical relations (represented by the Dative causee here) are syntactically inert.

Table 14. Grammatical relations

grammatical properties	NOM subject	ACC causee	DAT experiencer	ACC object	DEST object	DAT causee
Nominative	+	-	-	-	~	-
Agreement	+	-	-	-	-	-
Switch reference	+	-	+	-	-	-
Reflexivization	+	+/-	?	-	-	-
Control of Impersonal participles	+	-	-	-	-	-
Deletion across conjoint clauses	+	+	-	-	-	-
Control of infinitival clauses	+	+	+	-	-	-
Other control structures	+	+	-	+	-	-
Depictives	+	n/a	n/a	+	+	-
Non-adjacent modifier	+	?	-	+	?	-
Attributive case-agreement	+	+	-	+	-	-
Passivization	n/a	+	-	+	-	-

15.3. Other arguments

Grammatical relations other than subjects and direct objects were not studied syntactically in detail, and in their identification we will rely only on their semantics and their morphological marking. The verbal valence patterns in the active constructions are described in Chapter 14, where the morphological marking of the arguments is also addressed. It should be noticed, however, that arguments other than the subject and the direct object demonstrate considerably lower syntactic activity: they do not control reflexivization, switch-reference, depictives, and the infinitival clause, do not passivize, and do not trigger verbal agreement. Among the lower grammatical relations only the Lative indirect object functions as a syntactic controller of certain types of subordinate clauses (20.2.2.1.1, 20.2.3.2.2) and can be passivized (16.1.1.3). However, its other properties are unstudied.

As distinct from the higher grammatical relations of the subject and the object, other arguments cannot normally be coreferentially deleted. On the other hand, unlike adjuncts (15.4), they do not control the non-referential null and cannot be removed from the sentence without affecting its well-formedness (see section 21.2). Thus some verbs are likely candidates for more than three semantic arguments, although syntactically they might only be two-place. Examples are the verbs *xudasi-* 'sell' and *gada-* 'buy'. Although in a particular sentence three (1098a) or four (1098b) nominals bear a specific grammatical and semantic relation to them, for the well-formed structure only two arguments (the agent and the patient) must be overtly present or referentially implied (1098c).

(1098) a. *Bi   gada:-mi*   *xeleba-wa*   *ila*   *tieze-zi.*
        me   buy.PAST-1SG   bread-ACC   three   ruble-INST
        'I bought bread for three rubles.'

    b. *Bi   ñö: ña:-wa-ni*   *niŋka-du*
        me   sable   skin-ACC-3SG   Chinese-DAT

        xudasi-e-mi   *omo*   *taŋgu*   *tuŋa*   *tieze-zi.*
        sell-PAST-1SG   one   hundred   fifty   ruble-INST
        'I sold the sable fur to a Chinese for a hundred and fifty rubles.'

    c. *Bi   xeleba-wa*   *gada:-mi.*
        me   bread-ACC   buy.PAST-1SG
        'I bought some bread.'

15.4. Clausal adjuncts

Like all other grammatical relations, adjuncts can relativize (Chapter 19) but are syntactically inert with respect to controlling properties. Since adjuncts are not obligatory in the semantic representation of the clause, as distinct from

arguments, they can easily be dropped from a sentence with a non-specific interpretation. However, they are not normally able to control a referential null.

Adjuncts are described below from the point of view of their semantics and formal expression; the section is structured around their semantic types. In this section we only concentrate on those adjuncts that are encoded by oblique-case noun phrases, but naturally, adverbs and postpositional phrases express various adverbial meanings, see Chapter 10. We do not deal here with adjuncts in voice-related constructions, they are addressed in Chapter 16. Adverbial subordinate clauses are discussed in Chapter 21. Only the immediate constituents of the clause are treated here; on adverbs within the adjective and adverbial phrase, see 6.3, 10.1.4.1, and 10.1.7.2.

15.4.1. Spatial adjuncts

15.4.1.1. Locative noun phrase

Basic meaning: location, place in space ("in", "by" or "on"), cf:

(1099) a.   *Biki-le*   *sugzä:*   *egdi.*
            Bikin-LOC   fish   much
            'There is a lot of fish in Bikin.'

      b.   *Suaŋka*   *Suai*   *bäsa-la-ni*   *bagdi-e-ti.*
            Suanka   Suai   stream-LOC-3SG   live-PAST-3PL
            'The Suankas lived by the stream Suai.'

15.4.1.2. Lative noun phrase

Basic meaning: direction of movement, place of destination ("into", "onto" or "to"), cf.:

(1100) a.   *Bi*   *a:ŋa-za*   *e:-tigi-ni*   *zolo-wo*
            me   right-N   side-LAT-3SG   stone-ACC
            wende-le:-mi.
            hrow-SING.PAST-1SG
            'I threw the stone to the right.'

      b.   *Siŋe*   *men-e*   *xui-tigi:*
            mouse   REF-0   hole-LAT.REF
            susa-gi-e-ni.
            escape-REP-PAST-3SG
            'The mouse escaped to its hole.'

   c. *Pakula*   *bita-tigi*   *xetigene:-ni.*
        Pakula   spit-LAT   jump.PAST-3SG
        'Pakula jumped on the spit.'

   d. *Xuda-si:*   *ni:*   *dili-zi:*   *ima:-tigi*
        fur-V.PRP   man   head-INST.REF   snow-LAT
        ñuxaŋ-ki-ni.
        dive-PAST-3SG
        'The merchant dived head first into the snow.'

15.4.1.3. Ablative noun phrase

Basic meaning: starting point of movement ("from"), cf.:

(1101) a. *Bu Yara-digi*   *Xabarovska-tigi*   *ŋene:-mu.*
        we Yar-ABL   Khabarovsk-LAT   go.PAST-1PL.EX
        'We went from Yar to Khabarovsk.'

   b. *Keige*   *mo:-digi-ni*   *eu-gi-e-ni.*
        cat   tree-ABL-3SG   come.down-REP-PAST-3SG
        'The cat came down the tree.'

   c. *Bi* *xoŋto*   *škola-digi*   *oño-wo*   *b'a-mi.*
        me other   school-ABL   write-ACC   ge.PAST-1SG
        'I got a letter from another school.'

15.4.1.4. Prolative noun phrase

Basic meaning: the place through which or along which movement progresses (cf.: *coŋku-li* 'through the window', *uli-li* 'along the river'). More examples:

(1102) a. *Nemnes'e* *xuku-li*   *ataxi* *xuli:-ni.*
        thin   rope-PROL   spider go-3SG
        'A spider is moving along a thin rope.'

   b. *Ni:*   *wopti-li*   *xuli:-ti.*
        man   door-PROL   go-3PL
        'People are walking through the door.'

   c. *Ñ'aula*   *men-e*   *bugdi-zi*   *bugdi-li:*
        child   REF-0   leg-INST   leg-PROL.REF
        bugdi-li: *koŋko-do-gi:-ni.*
        leg-PROL.REF   beat-SEM-REP-3SG
        'The child is (playing) with his legs, beating one leg against another.'

d. | *Xokto-li* | *uli-le* | *ŋene:-fi,* |
road-PROL	water-LOC	go.PAST-1PL.EX
uli-li	*'ana-zi*	*ŋene:-fi.*
water-PROL	boat-INST	go.PAST-1PL

'We went to the river along the road, and along the river we went by boat.'

15.4.1.5. Dative noun phrase

Basic meaning: place in space ("in" or "on"). On the difference between the Dative and the Locative see 4.2.2.5.2. Examples:

(1103) a. | *Oloxi* | *men-e* | *xui-du-i* | *tue-ini.* |
| squirrel | REF-0 | hole-DAT-REF | winter-3SG |

'A squirrel passes winter in its hole.'

b. | *Bi* | *škola-du* | *tatusi-mi.* |
| me | school-DAT | study-1SG |

'I sstudy at school.'

c. | *Udie* | *maŋmu* | *omo* | *ba:-du* | *wakca:-ti.* |
| Udihe | Nanai | one | place-DAT | hunt.PAST-3PL |

'The Udihe used to hunt in the same place as the Nanai.'

15.4.2. Temporal adjuncts

Quite a few time expressions are borrowed from Russian, those for the time of day (*časa* 'hour', *minute* 'minute'), days of the week (*sereda* 'Wednesday'), and months of the year (*marta* 'March'). Months of the year may also be expressed periphrastically as 'the first month', 'the second month', and so on. These expressions are used adverbially in various case forms (see below). The names for periods of the day and the seasons are native and when they express location in time they behave as uninflected adverbs (10.1.2). Certain temporal meanings (punctual, anterior, and posterior) are expressed by postpositional phrases, on which see 10.2.

15.4.2.1. Dative noun phrase

The Dative noun phrase or the Dative adjectival phrase may express temporal meaning by describing the time of the event through a set of circumstances, often natural phenomena, such as *xekui-du* or *zexui bua-du* 'when it is hot', *tigde-du* 'when it rains', *mude-du* 'during the flood'. The temporal adjunct bears the secondary predicative function.

(1104) a. *Nua-ni   tigde-du   eme:-ni.*
        he-3SG   rain-DAT   come.PAST-3SG
        'He came when it was raining.'

     b. *Egdi   gegbeŋku-du   gada-mi-de   aja.*
        many   berry-DAT   collect-INF-FOC   nice
        'When there are many berries it is nice to collect them.'

     c. *Pou-pou-du   ei-mi   ise   bi.*
        dark-dark-DAT   NEG-1SG   see   me
        'In the darkness I can't see.'

     d. *Bi   eniŋe-i   min-e-we   tatusi-e-ni*
        me   mother-1SG   me-0-ACC   teach-PAST-3SG
        uli-le-i   za: seh-du.
        sew-PURP-1SG   ten   year-DAT
        'My mother taught me to sew when I was ten.' (SK 946)

The Dative noun phrase can express the additional meaning of a condition (1105a) or cause (1105b).

(1105) a. *Egdi   b'oto-du   tei-mi   tuge.*
        many   mushroom-DAT   gather-INF   quickly.
        If there are many mushrooms one can gather them quickly.'

     b. *Su: maŋa xekui-du   ugda   kaktaga:-ni.*
        sun   very   hot-DAT   boat   crack.PAST-3SG
        'The boat cracked with the strong sun.'

Furthermore, the Dative regularly marks the noun phrase that names the months (*di: bä:-du* 'in April (in the fourth month)), years (*ti: aŋa-du-ni* 'last year'), days (*vetornika-du* 'on Tuesday'), and hours (*zube časa-du* 'at two o'clock').

(1106) a. *Bi   ila   bä:-du   eme-zeŋe-i.*
        me   three   month-DAT   come-FUT-1SG
        'I'll come in March (the third month).'

     b. *Di: bä:-du   egdi   käfa.*
        four   month-DAT   many   tick
        'There are many ticks in April (the fourth month).'

15.4.2.2. Locative noun phrase

Locative noun phrases express location in time, for example, at a particular hour: *tuŋa časa-la* 'at five o'clock', as well as the time when somebody was of particular age: *za: se:-le-i* 'when I was ten' <ten age-LOC-1SG>. The time of day may be also expressed by the Dative (15.4.2.1).

15.4.2.3. Ablative noun phrase

Ablative noun phrases express the starting point in time: *ic'a-digi* 'since childhood', *subota-digi* 'since Saturday, from Saturday', and also:

(1107) *Zube* *aŋa-ni* *uta-digi* *wadi-du-ge.*
  two year-3SG that-ABL finish-PL-PERF
  'Two years have passed since then.'

15.4.2.4. Instrumental noun phrase

The Instrumental noun phrase expresses a period of time, usually when the sentence refers to the future (1108) or somehow expresses the future in the past (1109).

(1108) *Za:* *neŋi-zi* *eme-zeŋe-i.*
  ten day-INST come-FUT-1SG
  'I will go away for 10 days.'

(1109) a. *Nua-ni* *eme-gi-e-ni* *zube*
      he-3SG come-REP-PAST-3SG two
      neŋi-zi-ni.
      day-INST-3SG
      'He came for two days'.
   b. *Bue-ni* *min-du* *kusige-i*
      he-3SG me-DAT knife-REF
      bu-o:-ni *omo* *zua-zi-ni.*
      give-PAST-3SG one summer-INST-3SG
      'He gave me his knife for the summer.'

15.4.2.5. Lative noun phrase

The Lative noun phrase denotes the final point in time: *subota-tigi* 'until Saturday', *vetornika neŋi-tigi-ni* 'until Tuesday' (literally: 'until the Tuesday day').

15.4.2.6. Accusative noun phrase

The Accusative noun phrase, when it functions as a temporal adjunct, expresses a period of time (duration) in the past or the present.

(1110) a. *Nua-ni* *ila-ma*   *neŋi-ni*   *o-du*
    he-3SG three-ACC day-3SG   this-DAT
    bi-si-ni.
    be-PAST-3SG
    'He was here for three days.'

   b. *Bi* *xoton-du*   *zube-me* *neŋi-ni*
    me city-DAT   two-ACC day-3SG
    bi-si-mi.
    be-PAST-1SG
    'I was in the city for three days.'

   c. *Ei* *bi* *in'ei* *tuŋa-ma* *aŋa-ni bi:-ni.*
    this me dog five-ACC year-3SG be-3SG
    'I have had this dog for five years.'

15.4.2.7. Prolative noun phrase

Certain Prolative noun phrases express the frequency with which an action is repeated: *neŋi-li neŋi-li* 'day by day', *aŋa-li-ni aŋa-li-ni* 'one year after another'. It may also denote a period of time (1111b).

(1111) a. *Jegdige* *maŋga-na-li-ge,*   *neŋi-li*
    hero   strong-V-INC-PERF   day-PROL
    neŋi-li *tu* *maŋga-na-li-ge.*
    day-PROL all strong-V-INC-PERF
    'The hero began to get stronger, day by day he grew stronger.'
    (K 193)

   b. *Jei* *ze:* *seh-lie*   *bagdi-e-ni.*
    nine ten year-PROL live-PAST-3SG
    'He has lived for ninety years.' (SK 1069)

15.4.2.8. Nominative noun phrase

The Nominative noun phrase may express the duration of time in certain partly adverbialized expressions, cf.: *zube aŋa-ni* 'two years', *ei dogbo-ni* 'this night'. Here they are not viewed as "real" adverbs because they preserve some nominal properties, such as the ability to be modified by a pronominal determiner (9.7.4) or a Possessive affix. The latter encodes situational definiteness (4.1.3.3.2). See also the following example.

(1112) *Uti* *ina:-ni*   *omo* *aŋa-ni.*
   that last.PAST-3SG one year-3SG
   'It lasted one year.' (SK 120)

15.4.3. Source and cause adjuncts

15.4.3.1. Source of information

The source of knowledge or information is encoded by the Locative noun phrase, cf.:

(1113) a. *Bula   mo:-ni   wakta-la-ni   sa-u-ji.*
           ash.tree   tree-3SG   bark-LOC-3SG know-PAS-PRP
           'An ash tree can be recognized by its bark.'
       b. *Bi a-wa   teluɲu-le   sa:-mi.*
           me it-ACC   story-LOC   know.PAST-1SG
           'I have learnt it from a story.'
       c. *Bi a-wa   kiniga-la   sa:-mi.*
           me that-ACC   book-LOC   know.PAST-1SG
           'I have learnt it from a book.'
       d. *Bi si   tege-le-i   sa:-mi*
           me you   gown-LOC-2SG   know.PAST-1SG
           sin-e-we.
           you-0-ACC
           'I recognized you by your gown.'

15.4.3.2. Partitive meaning

Apart from the means described below, partitive meaning may also be rendered with the postposition *do-lo-ni* (10.2.1).

15.4.3.2.1. Locative noun phrase

The Locative noun phrase denotes a group of objects, one of which participates in the situation described by the clause.

(1114) a. *Ila   moxo-lo   omo   moxo camna:-ni.*
           three   cup-LOC   one   cup   break.PAST-3SG
           'One of the three cups has broken.'
       b. *Ei tege-le   omo-to   c'aligi.*
           this gown-LOC   one-REST   red
           'Only one of these gowns is red.'
       c. *Minti-le   ge: ni: anči.*
           we-LOC   bad   man   no
           'There are no bad people among us.'

d. *Omo*   *zugdiŋke-le*   *bi*   *omus'e*
    one   family-LOC   me   alone
    esi-ge:-mi.
    become-REP.PAST-1SG
    'Only I remained from the family.'

15.4.3.2.2. Nominative noun phrase

The same function is fulfilled by the Plural Nominative noun, often followed
by the quantifier *egdi* 'many, much, a lot' in a bare form (1116). The whole
noun phrase has a partitive meaning.

(1115) *Bi*   *men-e*   *tege-i*   *zube-me*   *xebu-zeŋe-i.*
       me   REF-0   gown-REF   two-ACC   take-FUT-1SG
       'I will take two of my gowns.'

(1116) a. *Bi*   *sita-na-i*   *egdi*   *Iwana*   *aja-zi*
           me   child-PL-1SG   many   Ivan   good-INST
           ñansule-ini.
           study-3SG
           'Among my children (only) Ivan studies well.'
       b. *Zugdi*   *egdi omo-so*   *zugdi*   *aja.*
           house   many one-REST   house   good
           'Among (these) houses, only one house is nice.'

15.4.3.3. Cause

The causal meaning is usually rendered by the Lative (1117), the Ablative
(1118), or the Locative (1119).

(1117) a. *Ugda*   *timadule*   *silie-tigi*   *teu*
           boat   morning   dew-LAT   all
           ñukto:-ni   *bi-s'e.*
           get.wet.PP-3SG   be-PERF
           'In the morning, the boat got all wet from the dew.'
       b. *Maŋga*   *su:-tigi*   *ektine:-ni.*
           strong   un-LAT   faint.PAST-3SG
           'He fainted because of the sun.'

c.   *imo:*   *xun-tigi-ni*   *bi*   *begdi:*   *tuge*
     fat   smell-LAT-3SG   me   leg.1SG   soon
     a:si-lege-ni
     get.better.PAST-3SG
     'so that my leg gets better soon thanks to the flavor of fat' (K 153)

d.   *B'ata*   *zolo-tigi*   *bugdi:*   *wa:-ni.*
     boy   stone-LAT   foot.REF   kill.PAST-3SG
     'The boy hurt his leg against a stone.'

f.   *Deŋe-digi*   *asi*   *ŋeigze.*
     lamp-ABL   very   bright
     'It is very bright from the lamp.'

(1118) *Abdä:*   *edi-tigi*   *tiŋme-ne:-ni.*
       leaf   wind-LAT   fall-DIST.PAST-3SG
       'Leaves fell down from the wind.'

(1119) *Egdeŋke,*   *j'eu*   *maŋga-la-ni*   *eme:-i,*
       interesting   what   stong-LOC-3SG   come.PAST-2SG
       jegdige?
       hero
       'I wonder, because of which difficulties did you come, hero?'
       (SKX 200)

In addition, the Locative noun phrase may render 'for' or 'instead' meaning, cf.:

(1120) *Bajta-la-ni*   *omo-mo*   *zawa:-ni.*
       crime-LOC-3SG   one-ACC   take.ACC-3SG
       'He took one for his crime.' (SKX 144)

15.4.4. Adjuncts of purpose and destination

15.4.4.1. Lative noun phrase

A Lative noun phrase may express a general purpose.

(1121) a.   *Ule:*   *xun-tigi-ni*   *in'ei*   *eme:-ni.*
            meat   smell-LAT-3SG   dog   come.PAST-3SG
            'The dog came to the smell of meat.'

      b.   *Ugda-tigi*   *tugbu-lege-mi*   *nixe-mi.*
           boat-LAT   cut.tree-PURP-SS   do-1SG
           'I am going to cut trees for the boat.'

15.4.4.2. Dative noun phrase

The Dative noun phrase expresses either the recipient/benefactive (1122), or the purpose of a certain creative activity (1123).

(1122) a. *Nua-ni   mamasa-du-i   tege-we*
    he-3SG   wife-DAT-REF   gown-ACC
    gada:-ni.
    buy.PAST-3SG
    'He bought a dress for his wife.'

  b. *Xala-ja   min-du.*
    pour-IMP.2SG   me-DAT
    'Pour (some) for me.'

(1123) a. *Od'o   mo:-wo   emuge-du*
    grandfather   tree-ACC   cradle-DAT
    u-wen-e-ini.
    bend-CAUS-0-3SG
    'Grandfather bends the wood for (to make) a cradle.'

  b. *Nakta ña:-wa-ni   eilisi:-ni   uŋta-du.*
    boar   skin-ACC-3SG scrape-3SG boots-DAT
    '(She) scrapes the boar skin for boots.'

  c. *Tikpe-we zueze-du   gazi-e-ni.*
    nail-ACC table-DAT bring-PAST-3SG
    'He brought some nails for the table.'

Adjectives that denote size (of clothes), such as *ic'a* 'small', *nektes'e* 'narrow', *umac'a* 'short', *sagdi* 'large', and *eŋme* 'wide' are regularly combined with the Dative noun phrase that expresses the person for whom the size is measured, cf.:

(1124) a. *Ei   aula sin-du   ic'a.*
    this   cap you-DAT   small
    'This cap is small for you.'

  b. *Ei aziga-du   tege umac'a.*
    this girl-DAT   gown short
    'The dress is too short for this girl.'

  c. *Teu-ni-du   na: ŋič'a odo-li-e-ni.*
    all-3SG-DAT   earth small become-INC-PAST-3SG
    'The earth became small for everybody.' (SK 666)

15.4.4.3. Destinative noun phrase

The destinative noun phrase can function in a sentence as an argument (the destinative object). Such cases are addressed in 16.2.2. Alternatively, it may correspond to the adjunct element that denotes the destination/purpose or has a substitutional meaning ('as something or somebody for somebody'). Like other adjuncts and unlike the destinative object, destinative adjuncts can easily be removed from the sentence.

In sentences with the destinative adjunct, the direct object is either encoded in a regular way with the Accusative noun phrase (1125), or is dropped under coreference (1126).

(1125) a. *Sin-e-we*   *gene-mi*   *jegdige*
      you-0-ACC   take-1SG   hero
      mamasa-na-ni.
      wife-DEST-3SG
      'I am taking you as a wife for the hero.' (K 158).

   b. *Bi   si*   *mamasa-na-i*   *gene-ze-mi*
      me   you   wife-DEST-1SG   bring-SUBJ-1SG
      Kanda   *mafa*   *aziga-ŋi-wa-ni.*
      Kanda   old.man   girl-AL-ACC-3SG
      'I will bring the old man Kanda's daughter as a wife for you.'
      (K 156).

   c. *Zugdi*   *malu-le-ni*   *bi*   *zugdi-ne-i*
      house   corner-LOC-3SG   me   house-DEST-1SG
      wo-to-i-ze   *saŋa-wa.*
      make-PERM-2SG-HORT   hole-ACC
      'Make a hole in the corner of a house as a house for me.'

   d. *Abuge*   *zugdi-we*   *men-di-ne-mi*
      father   house-ACC   REF-DAT-DEST-REF
      wo:-ni.
      make.PAST-3SG
      'The father made this house for himself.'

(1126) a. *Bi   tene*   *uisigi-mi*   *mafasa-na-mi.*
      me   CONT   rescue-1SG   husband-DEST-REF
      'I am rescuing (him) (designating) him as my husband.' (K 195)

   b. *Ma:ma*   *olokto-no:-ni*   *abuga-na-i.*
      grandmother   cook-DIR.PAST-3SG   father-DEST-1SG
      'The grandmother went cooking for my father.'

c.   *Ei   mo: ñaktu-se-we-ni*   *j'e-ne-mi*
     this tree   rot-PP.PAS-ACC-3SG   what-DEST-REF
     gazi-e-i?   *Saŋmiŋku-ne-mi.*
     bring-PAST-2SG   smoke-DEST-REF
     'Why did you bring this rotten tree? For (making) smoke.'

15.4.5. Manner adjuncts

Manner adverbials render various semantic nuances, and it is only by convention that they can be unified semantically. They are usually expressed by instrumental noun phrases with the different interpretations exemplified below.

15.4.5.1. Means of transportation

Examples: *ugda-zi* 'by boat', *fuetiŋe-zi* 'by plane', *begdi-zi* 'on foot', *di:n-zi begdi-zi* 'on all fours' <four-INST leg-INST>.

(1127) a.   *Ugda-zi   neugi-e-ti.*
            boat-INST   take.back-PAST-3PL
            'They took it back by boat.'
      b.   *Tue   käsa-zi   dieli-gi-e-i   ei*
           winter   eagle-INST   fly-REP-PAST-1SG   this
           tene   zeli-zi   sologi-e-i.
           CONT   bulltrout-INST   go.upstream-PAST-1SG
           'In the winter I came flying on an eagle, but now I have come upstream on a bulltrout.'
      c.   *Bi   xuku-zi   mo:-digi   eu-gi-mi.*
           me   rope-INST   tree-ABL   come.down-REP-1SG
           'I am going down the tree using a rope.'
      d.   *Motora-zi   ŋene-mi   eke.*
           motor-INST   go-INF   easy
           'It is easy to go by motor boat.'

15.4.5.2. Instrument

Examples:

(1128) a. *Loxo-zi*   *mafa-wa*   *wa:-mu*   *g'e:*
       saber-INST   bear-ACC   kill-IMI   bad
       so:ndo   *bi:-ni,*   *gida-zi*   *tada-zi*
       sin be-3SG   spear-INST   arrow-INST
       mä:usa-zi *wa:-mu*   *aja.*
       gun-INST   kill-IMI   good
       'It is a sin to kill a bear with a saber; to kill it with a spear, with an
       arrow, with a gun is good.' (K 176)
    b. *Meŋmu-me*   *moxo-zi*   *aisi-me*   *uniŋa-zi*
       silver-ADJ   cup-INST   gold-ADJ   spoon-INST
       min-e-we   *diga-wan-a-ja.*
       me-0-ACC   eat-CAUS-0-IMP.2SG
       'Feed me from a silver cup with a gold spoon.'
    c. *Ñ'aula*   *zolo-zi*   *wa-si:-ti.*
       boy   stone-INST   kill-IM-3PL
       'Boys are fighting with stones.'

15.4.5.3. Material

Examples:

(1129) a. *Niŋka*   *seule-zi-ni*   *tege*   *go:*   *go:*
       Chinese   silk-INST-3SG   gown   long   long
       teisi:-ni.
       wear-3SG
       'A gown (made) of Chinese silk is worn for a very long time.'
    b. *Ei uniŋa-wa*   *j'e-zi*   *wo-so?*
       this spoon-ACC   what-INST   make-PP.PAS
       'What is the spoon made from?'

The instrumental adjunct denoting the material from which a certain object is made may co-occur with a verb of creation even in the absence of the object noun phrase itself. In such a case, the instrumental adjunct actually refers to the characteristic of the object, incorporated into the verbal form (on this see 8.1.1), rather than to a characteristic of the process itself.

(1130) a. *Käŋa*   *jä:-zi-ni*   *okto-ŋisi:-ti.*
       deer   antler-INST-3SG   medicine-V-3PL
       'They make medicine from the deer's antlers.'

b. *Ñö:*   *ña:-zi-ni*   *au-ŋisi-e-ni.*
    sable   fur-INST-3SG   cap-V-PAST-3SG
    'She sewed a cap from sable fur.'

c. *Taluga-zi*   *ugda-ŋisi-e-ni.*
    birch.bark-INST   boat-V-PAST-3SG
    'He made a boat from birch bark.' (K 181)

15.4.5.4. Measure, price, value

Examples:

(1131) a. *Bue-ni*   *min-du*   *xudasi-e-ni*
           he-3SG   me-DAT   sell-PAST-3SG
           kusige-i   *zu:*   *tieze-zi.*
           knife-REF   two   ruble-INST
           'He sold me his knife for two rubles.'

b. *Xuda-si:*   *ni:*   *naŋda-wa*   *ño:-zi*
    sell-IM.PRP   man   debt-ACC   sable-INST
    ga:gi-e-ni.
    collect-PAST-3SG
    'The merchant collected his debts in sables.'

c. *Ei*   *zugdi-ziga-wa*   *sagdi-le-we-ti*
    this house-PL-ACC   big-N-ACC-3PL
    adi   *metra-zi*   *wo:-ti?*
    how.many   meter-INST   make.PAST-3PL
    'How many meters long did they make these houses?'

15.4.5.5. Manner

Different types of manner meanings are described by the Instrumental noun phrase: *paig'a-zi gusi:-ni* 'play cards', *koxo-zi su:le-ini* 'is ill with furunculosis', and *tege-zi* 'with one's clothes on', *sewe-zi* 'in the shape of a spirit'. It also expresses the manner of speaking (1132a), the part of the body employed for an action (1132b), the basis for making a judgment (1132c), the manner of living (1133), and the cause (1134).

(1132) a. *udie keje-zi* 'in the Udihe language'.

b. *Bi*   *men-e*   *ja:-zi*   *ise:-mi,*
    me   REF-0   eye-INS.REF   see.PAST-1SG
    men-e   *ku'ai-zi*   *dogdi-e-mi.*
    REF-0   ear-INST.REF   hear-PAST-1SG
    'I saw (it) with my own eyes and heard with my own ears.'

c. *Nua-ni*   *koli-zi*   *dian-ki-ni.*
   he-3SG   law-INST   say-PAST-3SG
   'He was speaking according to the law.'

(1133) a. *Udie*   *tue-ze-zi*   *bagdi-e-ti.*
   Udihe   winter-N-INST   live-PAST-3PL
   'The Udihe lived in winter huts.'

b. *Anana*   *kawa-zi*   *bagdi-e-mu.*
   long.ago   tent-INST   live-PAST-1PL.EX
   'Before we used to live in (grass) tents.'

(1134) *B'ata*   *jausala:-ni*   *gegbunku-zi.*
   boy   poison.PAST-3SG   berry-INST
   'The boy poisoned himself with berries.'

15.4.5.6. Circumstance

The Instrumental noun phrase encodes adjuncts that denote various circumstances accompanying the situation, particularly a secondary object that is involved.

(1135) a. *Geje*   *uti*   *solümi-zi*   *diga-iti*
   together   that   dried.fish-INST   eat-3PL
   ulikte-we   *imo:.*
   shaman.lard-ACC   fat
   'They eat the shaman lard together with dried fish.'

b. *Bi*   *čaja-wa*   *sata-zi*   *umi-mi.*
   me   tea-ACC   sugar-INST   drink-1SG
   'I drink tea with sugar.'

c. *Xapakta*   *gegbenku-we-ni*   *sata-zi*
   honeysuckle   berry-ACC-3SG   sugar-INST
   olokto-u-ji.
   cook-PAS-PRP
   'The honeysuckle berries are to be cooked with sugar.'

d. *Bi*   *men-e*   *mä:usa-zi:*   *nene:-mi.*
   me   REF-0   gun-INST.REF   go.PAST-1SG
   'I went with my own gun.'

15.4.5.7. Comitative

Comitative adjuncts denote the accompanying person and so correspond to animate nouns. They are encoded as an Instrumental noun phrase, which may also function as a modifier within a noun phrase. On the systematic difference

between comitative modifiers and adjuncts see 13.5.1. The comitative adjunct is semantically associated with the subject participant. The verb demonstrates Singular agreement (1136). Plural agreement is possible only when the subject is formally or semantically Plural (1137).

(1136) a.   *Nua-ni*   *alagdig'a*   *aziga-zi*   *ŋene:-ni.*
        he-3SG   beautiful   girl-INST   go.PAST-3SG
        'He was walking with a beautiful girl.'

      b.   *Nua-ni*   *ei*   *b'ata-zi*   *eme:-ni.*
        he-3SG   this   boy-INST   come.PAST-3SG
        'He came with this boy.'

      c.   *Bi*   *xunazi:*   *keige*   *Wasia-zi*   *gusi:-ni.*
        me sister.1SG   cat   Vasja-INST   play-3SG
        'My sister is playing with the cat Vasja.'

      d.   *Ja:*   *men-e*   *sita-zi:*   *xokto*
        cow   REF-0 s   on-INST.REF   road
        cu-li-ni   *eme-ini.*
        along-PROL-3SG   come-3SG
        'The cow is coming down the road with its calf.'

(1137) *Ogbö*   *eni-zi:*   *buga-du*   *oŋk'o-iti.*
       moose   female-INST.REF   clearing-DAT   graze-3PL
       'The mooses graze with their females in a clearing.'

Chapter 16
Valence-changing operations

In Chapter 14 the verbal valence patterns were described according to the semantic arguments of the corresponding verb. Each semantic argument was placed in a one-to-one correspondence with a syntactic argument that has to be overtly present in a sentence or can be recovered through coreference with a previously mentioned element. However, more than one correspondence between semantic roles and grammatical relations is possible. We will refer to these as different sentence constructions. So by construction we mean a syntactic structure that encodes a certain mapping relationship between semantic roles and grammatical relations. This chapter addresses the syntactic operations that change the sentence construction. When such an operation is also morphologically marked in the verbal form itself we will refer to different voice constructions (16.1). Yet, the alternative encoding of semantic roles by grammatical relations is sometimes not accompanied by special morphological markers in the verb; such constructions are addressed in 16.2.

16.1. Voice constructions

Sentence constructions that correspond to the valence patterns described in Chapter 14 involve, conventionally speaking, the direct voice characterized by two properties. First, the number of semantic arguments (semantic roles) is exactly equal to the surface number of syntactic arguments. In other words, all arguments must be either overtly present or retrieved from the context. Second, in the direct voice constructions the agent argument corresponds to the grammatical relation of the subject, as identified in 15.1.1. Voice constructions that violate at least one of these conditions will be called indirect. The following indirect voice constructions will be addressed here: Passive, Agentless Passive, Causative, Decausative, and Reciprocal. In each of them the verb is characterized by a special morphological marking that encodes the corresponding indirect voice.

Obviously, different indirect voices cannot co-occur with each other and with the direct voice within one clause. The only exception is the Causative, which co-occurs with another indirect voice. This is because the Causative is the only indirect voice that increases the verbal valence. Below we cite the examples that show the Causative co-occurring with the Agentless Passive. On the passivization of causative constructions see 16.1.4.4.

(1138) *B'ata-wa*   *diga-wan-a-sa.*
       boy-ACC   eat-CAUS-0-PP.PAS
       'The boy is fed.'

16.1.1. Passive

The Passive is only allowed for transitive verbs. As was mentioned in 15.2.1.2, mostly direct objects are passivized in Udihe, on possible exceptions see 15.1.1.3. Several passive verbs do not have a non-passive equivalent (8.2.1.5.2).

The meaning of the Passive in Udihe is actional. Compared to certain other languages that have the Passive, the Udihe Passive is used rather rarely. Some functions which cross-linguistically are typical of the Passive are fulfilled by the Agentless Passive construction (16.1.2). The only use of the Personal Passive is for the topic-promoting of the patient argument, although other strategies are available for this as well (see Chapter 24). De-emphasizing the agent, which is universally known to be another function of the Passive, is a function of the Agentless Passive in Udihe (16.1.2).

In the Passive construction the agent participant does not correspond to the grammatical relation of the subject. The passive agent is marked by the Dative and bears the grammatical relation of adjunct. It is normally overtly present; however, removing it from the sentence does not yield ungrammaticality. A certain split is observed in the grammatical encoding of the patient/theme argument, depending on its deictic status.

16.1.1.1. Passive constructions with the Nominative subject

The pronominal patient corresponds to the Nominative subject, that is, to the nominatively marked noun phrase which is characterized by a certain cluster of grammatical properties (15.1.1). The Nominative subject may be encoded by the overt personal pronouns of the 1st, 2nd, or 3rd person (1139), but is even more likely to be coreferentially deleted (1140). In both cases it triggers subject agreement on the passive verb.

(1139) a. *Si*   *min-du*   *gida-si-u-ẓeŋe-i.*
         you me-DAT   spear-V-PAS-FUT-2SG
         'You will be killed by me.'
     b. *Min-du*   *akinda-u-ze-i*   *si*
         me-DAT   stab-PAS-SUBJ-2SG   you
         meime-ẓi.
         harpoon-INST
         'You will be stabbed by me with the harpoon.' (K 149)

c. *Bi   eniŋe-du-i   abuga-du-i*
   me   mother-DAT-1SG   father-DAT-1SG
   wende-le-wo:-mi.
   throw-SING-PAS.PAST-1SG
   'I am abandoned by my mother and father.'

(1140) a. *Toxö-du   imi   bugo-wu-i?*
          cloud-DAT   why   covered-PAS-2SG
          'Why are you covered with clouds?' (K 124)

c. *J'eu-du   mag-u-o:-u?*
   what-DAT   kill-PAS-PAST-2PL
   'Who killed you?' (K 178)

d. *Agdi-du   ŋele-we-si-u-i.*
   thunder-DAT   be.afraid-CAUS-IM-PAS-1SG
   'I am frightened by thunder'.

f. *Buk-ki-ni   Uza,   kalima-du*
   die-PAST-3SG   Uza   whale-DAT
   xuktu-wo:-ni.
   carry.away-PAS.PAST-3SG
   'Uza died, he was taken away by the whale.' (K 114)

16.1.1.2. Subjectless passive constructions

A non-pronominal (lexical) patient argument is encoded by the Accusative noun phrase. In section 15.2.3 it was shown not to have any subject properties and to correspond to the grammatical relation of the direct object. It does not trigger verbal agreement. Thus, although the agent is demoted to the adjunct role, the nominal patient argument is not promoted to the subject, and the whole construction is characterized as subjectless.

(1141) a. *Ei   lenta-wa   sin-du   eniŋe-du*
          this   ribbon-ACC   you-DAT   mother-DAT
          bu-wo:-ni.
          give-PAS.PAST-3SG
          'This ribbon is given to you by the mother.'

b. *Soŋgo   ule:-we-ni   diga-wu-ini   in'ei-du.*
   bear   meat-ACC-3SG   eat-PAS-3SG   dog-DAT
   'The bear meat is being eaten by dogs.'

c. *J'e-we   diga-wo:-ni?*
   what-ACC   eat-PAS.PAST-3SG
   'What was eaten?'

d. *B'ata-wa*   *abuga-du*   *danči-wo:-ni.*
    boy-ACC   father-DAT   curse-PAS.PAST-3SG
    'The boy was cursed by his father.'

There is a certain tendency (especially among younger speakers) to omit the Accusative marker on the noun phrase with the patient meaning even when it is a lexical noun. This tendency seems to have developed under the influence of the Passive construction in Russian, where the corresponding noun phrase is always encoded by the Nominative, and perhaps under the analogous influence of the pronominal pattern (16.1.1.2.1). Sometimes the Accusative affix is missing for purely phonetic reasons (see 4.2.2.2.2). An example is:

(1142) *Uti tene*   *oloxi-gde*   *zaw-u-o:-ni*
       this CONT   squirrel-FOC   catch-PAS-PAST-3SG
       b'ata-du.
       boy-DAT
       'This squirrel was caught by the boy.'

16.1.1.3. Passivization of the indirect object

We do not have enough evidence for the passivization of the indirect object marked with the Lative affix *-tigi*; certainly it is not a frequent option. However, the following example suggest that it is not impossible, at least by passivization of a causative verb, cf. (1143a) and (1143b). In the latter the passive subject is not overtly present, but the verbal agreement indicates that it is 1st person Plural Exclusive.

(1143) a. *Uli*   *min-tigi*   *eme:-ni.*
           water   we-LAT   come.PAST-3SG
           'Water came to us.'
       b. *Ele*   *uli-we*   *eme-wen-e-u-mu.*
           enough   water-ACC   come-CAUS-0-PAS-1PL.EX
           'It is enough for us to be sent with water.' (SK 1122)

16.1.2. Agentless Passive

The Agentless Passive is very frequent both in transitive and intransitive clauses. Its main function is to eliminate or demote the agent, while the communicative status of the direct object (in transitive clauses) remains basically the same as in the original direct construction.

The meaning of the Impersonal Passive is actional; it may also render the habitual meaning or a whole array of modal meanings. Its arguments are often semantically non-referential.

16.1.2.1. Morphology

The Impersonal Passive verbal forms are analytic; they consist of the content verb and, optionally, the copula 'be' in a certain temporal form. The copula takes 3rd person Singular agreement affixes, and, according to the general rule (17.1.1.2), it is normally omitted in the Present tense. The content verb appears in the form of passive participles (7.6.1.2), either of the Present, or the Past, or the Future tense.

The Impersonal Passive opposes two moods, the Indicative and the Necessitative. In the Indicative the content verb is represented by Present passive participles (the imperfective Agentless Passive) or Past passive participles (the perfective Agentless Passive). The two aspectual forms indicate respectively whether the event is in progress at the time of reference or has finished by the time of reference. The Necessitative Impersonal Passive is formed with the Future passive participles.

The time reference of the whole construction is determined by the tense of the copula 'be', namely, either the Present tense (in which case the copula is optional), the Past or Perfect tense, or the Future tense. For the imperfective and the Necessitative Passive, Future tense forms are not found. Neither have we the complete paradigm for the negative forms.

The table below presents the system of Agentless Passive for the verb *zawa-* 'take', with approximate translations. The passive participle forms of this verb, which participate in the Agentless Passive constructions, are *zawa-u-i* 'being taken' (passive Present Participle), *zawa-sa* 'taken' (passive Past Participle), and *zawa-u-zeŋe* 'which had to be taken' (passive Future Participles).

(1144)

	tense of the copula	
Present	Past/Perfect	Future

Indicative
Imperfective

zawa-u-i (bi:-ni)	*zawa-u-i bi-s'e* -	
'is being taken'	*zawa-u-i bi-si-ni*	
'is taken'	'was being taken'	
	'was taken'	

e-u-ji zawa	*e-u-ji zawa bi-s'e*	
'is not being taken'	'was not being taken'	
'is not taken'		

Perfective

zawa-sa (bi:-ni)	*zawa-sa bi-s'e*	*zawa-sa*
	zawa-sa bi-si-ni	*bi-zeŋe-ni*
'was taken'	'had been taken'	'will be taken'
'is taken'		
'has been taken'		

e-u-se zawa,
e-ptile zawa
'was not taken'
'is not taken'
'has not been taken'

Necessitative

zawa-u-zeŋe (bi:-ni)	*zawa-u-zeŋe bi'-se*	-
'has to be taken'	*zawa-u-zeŋe bi-si-ni*	
	'had to be taken'	

e-u-zeŋe zawa
'has not to be taken'

The Agentless Passive occurs in participial subordinate clauses. The example below presents an adverbial postpositional clause, based on the Present passive participle.

(1145) *Zeu-we*   *bu:-ji*   *edeisini*   *eitene teu*
       food-ACC   give.PAS-PRP   when   now   all
       diga-zaŋa-ni.
       eat-FUT-3SG
       'When the food is given, he will eat it all immediately.'

16.1.2.2. Sentence construction

As was mentioned above, the primary pragmatic function of the Impersonal Passive is to encode the "de-emphasized" status of the agent, which may be semantically indefinite, universal, non-specific, or generic. Hence the agent argument is absent, and so is the grammatical subject. Only a few examples are found where the agent is expressed lexically by the Dative noun phrase, such as (1146), but they are extremely rare and not accepted by all speakers. They obviously appeared under the influence of the regular Passive (16.1.1).

(1146) *Ei   oloxi-we*   *b'ata-du*   *zawa-sa.*
       this squirrel-ACC   boy-DAT   catch-PP.PAS
       'This squirrel is caught by the boy.'

In Agentless Passive constructions the direct object retains the function, case marking, and syntactic properties of the direct object (15.2). However, the morphological Accusative is sometimes absent. This reflects the general tendency to omit the Accusative marker (4.2.2.2), as shown in the following free variants:

(1147) *Ule:(-we)   zi:-se.*
        meat(-ACC)   cut-PP.PAS
        'The meat is cut.'

Agentless Passive constructions with intransitives naturally lack the direct object argument. In some rare cases, the object is not present even if the verb is transitive. It then has an indefinite interpretation, cf.:

(1148) *Zugdi koso-lo-ni   xula-zi   dai-sa.*
        house corner-LOC-3SG   blanket-INSTR   cover-PP.PAS
        'Something is covered with the blanket in the corner of the house.'
        (K 156)

16.1.2.3. Imperfective Agentless Passive

16.1.2.3.1. The meaning of temporal forms

The Imperfective Agentless Passive describes a situation simultaneous with the time of reference, which in its turn is expressed by the copula. Present and Past forms of the Imperfective Agentless Passive are exemplified in (1149a) and (1149b) respectively.

(1149) a.   *Nuan-di-ni   egdi-me   bu:-ji.*
            he-DAT-3SG   much-ACC   give.PAS-PRP
            'A lot is given to him.'
       b.   *Anana   dawa   namikta-wa-ni   läs(i)*
            before   salmon dried.fish-ACC-3SG   very
            wagisi-u-i   bi-s'e.
            dry-PAS-PRP   be-PERF
            'Long ago people used to dry salmon.'

16.1.2.3.2. Modal meaning

In Udihe the Present tense is employed to express a timeless universal situation (7.8.1.1.2). This is also true in the case of the imperfective Impersonal Passive in

the Present tense, as is demonstrated in the following examples. An additional implication might also be that of possibility or necessity.

(1150) a. *Ei   b'oto-wo*   *diga-u-ji.*
            this mushroom-ACC   eat-PAS-PRP
            'This mushroom is edible.'

    b. *Suese-we   e-u-ji*   *aisi-gi.*
            axe-ACC   NEG-PAS-PRP   mend-REP
            'You can't mend this axe.'

    c. *Čaja-wa   olokto-u-ji.*
            tea-ACC   boil-PAS-PRP
            'One boils tea (tea should be boiled).'

    d. *Ei   mäunda-zi*   *bui-we*   *wakca-u-i.*
            this gun-INST   animal-ACC   hunt-PAS-PRP
            'One kills animals with this gun.'

    e. *Ule:-we   olokto-u-ji.*
            meat-ACC cook-PAS-PRP
            'One cooks meat (meat should be cooked).'

    f. *Wa:*   *ni:*   *ni:-we*   *wa-u-i.*
            kill.PP   man   man-ACC   kill-PAS-PRP
            'Who killed a man must be killed.' (SK 202)

16.1.2.4. Perfective Agentless Passive

The Perfective Agentless Passive indicates that the event took place and was finished prior to the time of reference, be it present, past, or future. The construction describes the event itself and not the resulting state, as does the resultative construction (17.2.2.5). This can be seen from predicate adverbials that characterize verbal action. This is shown in (1151) where the time adverb *tineŋi* 'yesterday' refers to the actual time when the letter was written.

(1151) *Ei   oño-wo*   *tuge / tineŋi*   *oño-so.*
        this letter-ACC   quick/yesterday   write-PP.PAS
        'This letter was written quickly/yesterday.'

The Present tense forms indicate that the action took place in the past with the implication that its result is relevant to the present. It can be translated into English with the Present or the Past Passive (1152). The perfective Past Impersonal Passive is similar in meaning to the Pluperfect in Udihe (7.8.1.5). It indicates that the action took place in the past and was finished prior to another moment in the past (1153a) or a long time ago (1153b). The closest English equivalent would be the Pluperfect Passive. The Future indicates that the action will take place in the future (1154).

(1152) a. *Ei uniŋa-wa   j'e-zi   wo-so?*
         this spoon-ACC   what-INST   make-PP.PAS
         'What is/was this spoon made of?'

      b. *Oño-wo   oño-so   (bi:-ni).*
         letter-ACC   write-PP.PAS   be-3SG
         'The letter is/was written.'

      c. *Zueze   egelie   te:-se.*
         table   around   sit-PP.PAS
         'People have sat down around the table.'

(1153) a. *Bi eme-gi:-si   oño-wo   oño-so*
         me come-REP-PC.1SG   letter-ACC   write-PP.PAS
         bi-si-ni.
         be-PAST-3SG
         'When I returned the letter had already been written.'

      b. *Ei oño-wo   anana   oño-so*
         this letter-ACC   long.ago   write-PP.PAS
         bi-s'e.
         be-PERF
         'This letter had been written a long time ago.'

(1154) *'Ana-wa   wo-so   bi-zeŋe-ni.*
         boat-ACC   make-PP.PAS   be-FUT-3SG
         'The boat will be made.'

16.1.2.5. Necessitative Agentless Passive

The Necessitative Agentless Passive is formed with the Future passive participle and the copula in the Present (optionally) or in the Past. So in the Agentless Passive the Present and Past forms of the Necessitative are opposed, while the active Necessitative has only past reference (see 7.9.3). Both transitive and intransitive verbs occur in these constructions.

    The Present tense expresses the universal possibility or necessity to perform the action named by the verb, and the modal state is of a general timeless character (1155). The Past tense expresses necessity or obligation that pertains to the time prior to the moment of speech (1156).

(1155) a. *Ei wo:-tigi   tukti-mi   mute-u-zeŋe.*
         this mountain-LAT   climb-INF   can-PAS-FP
         'It is possible to climb up this hill.'

      b. *Ono   dian-a-u-zeŋe   a-wa.*
         how   say-0-PAS-FP   this-ACC
         'How do you say it (correctly)?'

    c.   *O-du*   *zugdi-we*   *wo-u-zeŋe.*
          this-DAT   house-ACC   make-PAS-FP
          'Here a house should be built.'

(1156) a.   *Tiŋeni*   *oño-u-zeŋe*   *bi-si-ni*
          yesterday   write-PAS-FP   be-PAST-3SG
          oño-wo.
          letter-ACC
          'The letter had to be written yesterday.'
    b.   *Sin-e-we*   *anana*   *koŋko-u-zeŋe*   *bi-si-ni.*
          you-0-ACC   long.ago   beat-PAS-FP   be-PAST-3SG
          'You had to be beaten a long time ago.'
    c.   *Anana*   *ŋene-u-zeŋe nixe:-ni*   *magazina-tigi.*
          long.ago   go-PAS-FP do.PAST-3SG   shop-LAT
          'One had to go to the shop a long time ago.'
    d.   *Zaŋza*   *teu*   *tiŋmene:-ni,*   *imexi-we*
          fence   all   fell.PAST-3SG new-ACC
          wo-gi-u-zeŋe   *bi-si-ni.*
          make-REP-PAS-FP   be-PAST-3SG.
          'The fence fell down completely, one had to make a new one.'

In the Northern dialect, as recorded by Kormušin, Agentless Passive Necessitative may occur in personal function and does not express Necessitative meaning, cf.:

(1157) a.   *I:-u-zeŋe*   *min-e-we*   *wa-za.*
          enter-PAS-FP   me-0-ACC   kill-SUBJ
          'If I enter, he will kill me.' (K 157)
    b.   *Sugzä-wa*   *e-mu*   *zepte,*   *ono*   *bi-u-zeŋe?*
          fish-ACC   NEG-1PL.EX   eat   how   be-PAS-FP
          'We don't eat fish, how shall we live?' (K 174)

16.1.2.6. Definite agent

As was mentioned above, the agent of the personal Passive construction is conceived as generic or indefinite. However, in some cases it may refer to the speaker herself if the speaker chooses to conceive the situation "from outside" (1158). Furthermore, an agent may be definite (known to the speaker) but be beyond her present scope of attention (1159).

(1158) a.   *Eniŋe,*   *aziga-ziga*   *mäwa-wa-ti*   *i:-le*
          mother   girl-PL   heart-ACC-3PL   what-LOC
          nede-u-ji?
          put-PAS-PRP
          'Mother, where to put (shall I put) the girls' hearts?' (K 106)

      b.   *Anda-i*   *diga-laga-ni*   *j'e-we*
          friend-1SG   eat-PURP-3SG   what-ACC
          olokto-u-ji?
          cook-PAS-PRP
          'What to cook (shall I cook) so that my friend eats?' (K 126)

      c.   *I:-u-zeŋe*   *min-e-we*   *wa-za,*
          enter-PAS-FP   me-0-ACC   kill-SUBJ
          e-li   *i:*   *e-u-zeŋe*   *b'a*   *aziga.*
          NEG-CC.SS   enter   NEG-PAS-FP   get   girl
          'If I enter, he will kill me, if I don't enter, I won't get the girl.'
          (K 157)

      d.   *Ono*   *zawa-u-zeŋe?*
          how   catch-PAS-FP
          'How to catch him (how shall I catch him)?'

(1159) a.   *Sin-du*   *zeu-we*   *bu-se.*
          you-DAT   food-ACC   give-PP.PAS
          'The food is given to you.'

      b.   *Moxo-tigi*   *čaja-wa*   *čudi-se.*
          mug-ALL   tea-ACC   poor-PP.PAS
          'The tea is poured into the mug.'

      c.   *Sin-e-we*   *o-du*   *ise-se.*
          you-0-ACC   this-DAT   see-PP.PAS
          'You were seen here.'

16.1.2.7. Intransitive clause

The examples below demonstrate intransitive sentences with the Agentless Passive. In intransitive constructions the agent can only have a generic interpretation.

(1160) a.   *O-du*   *udie*   *keje-zi-ni*   *dian-a-u-ji.*
          this-DAT   Udihe   language-INST-3SG   speak-0-PAS-PRP
          'Here they speak Udihe.'

      b.   *O-du*   *te-u-ji.*
          this-DAT   sit-PAS-PRP
          'Here one sits.'

c. *Ute   bede e-u-ji   dian-a.*
    that   like NEG-PAS-PRP   speak-0
    'You shouldn't speak this way.'

d. *Anana   egdi-me   etete-se.*
    long.ago   much-ACC   work-PP.PAS
    'A long time ago people were working a lot.'

e. *Nemca-zi   w'ali-se,   i:bene-zi*
    German-INST   fight-PP.PAS   Japanese-INST
    w'ali-se.
    fight-PP.PAS
    'One was fighting with Germans and with Japanese.'

f. *Uta-la   e-ptile   ·   xeŋde.*
    that-LOC   NEG-PP.PAS   step
    'Nobody has walked there.'

16.1.3. Causative

The Causative construction is monoclausal. The Causative derivation is marked by the suffix *-wAn-* in the verbal form with the morphology discussed in 8.2.1.2. It adds an extra valence to the base verb, a participant who is caused to perform the action. This will be called the causee, while the participant who instigates the action (the causer) will be conventionally called the agent. The Causative constructions are presented depending on the initial valence patterns of the corresponding non-Causative verbs.

16.1.3.1. Null-argument verbs

Null-argument (meteorological) verbs (14.1) can causativize in certain contexts, normally in addresses to God or the powers of nature, or in folklore. Causativization adds the agent valence to the resulting verb, but the causee argument is absent. Thus the verb does not transitivize, as, for example, one-argument verbs do (16.1.4.2), and the resulting verb takes only one valence, the agent. The latter corresponds to the subject noun phrase.

(1161) a. *Ñaŋmu-gi-wen-e-je.*
          clear-REP-CAUS-0-IMP.2SG
          'Make it clear up (the sky)!'

      b. *Tigde-wen-e-je.*
          rain-CAUS-0-IMP.2SG
          'Make it rain!'

c. *Täs(i)*   *tigde-wen-e-mi.*
   very   rain-CAUS-0-1SG
   'I make heavy rain.' (K 124)

d. *Saŋña*   *p'ou-p'ou*   *odo-waŋ-ki-ni.*
   smoke   dark-dark   become-CAUS-PAST-3SG
   'It has become dark from the smoke.' (SK 1019)

16.1.3.2. Intransitive verbs

Causatives derived from intransitives are widespread. In the corresponding construction the agent is encoded as the subject noun phrase, while the causee behaves syntactically and morphologically as a direct object (see 15.1.3.2).

16.1.3.2.1. Encoding of the causee argument

According to the general rule (15.2), the direct object argument (causee, in this case) is encoded by the Accusative noun phrase if it does not bear Reflexive Possessive affixes (1162), or by the Nominative noun phrase if it is reflexive (1162).

(1162) a. *Od'o-wo*   *tomo-won-o-jo.*
   grandfather-ACC   warm-CAUS-0-IMP.2SG
   'Make the grandfather warm.' (K 170)

b. *Ei*   *paki-laŋki-we*   *j'e-du*
   this   skillful-ADJ-ACC   what-DAT
   ŋene-wen-e:-i?
   go-CAUS-PAST-2SG
   'Why did you let this very skillful (woman) go?' (K 173)

c. *Uli-we-de*   *mude-wen-e-mi.*
   river-ACC-FOC   flow-CAUS-0-1SG
   'I make rivers flow.' (K 124).

d. *Exe*   *si*   *xuga-i*   *ele*   *ele*
   sister   you   bear.cub-2SG   soon   soon
   e-zi   *xuli-wan-a.*
   NEG-IMP.2SG   go-CAUS-0
   'Sister, don't let your bear cubs go far away.' (K 131)

e. *Kanda*   *mafa*   *b'ata-ni*   *wa:-ma-ni*
   Kanda   old.man   son-3SG   kill.PP-ACC-3SG
   ni:-ne-gi-weŋ-ke-i.
   man-V-REP-CAUS-PERF-1SG
   'I have made the murdered son of the old man Kanda a man again.' (K 193)

f. *Eineŋi*   *eme-weŋ-ki-ni*   *min-e-we.*
    today   come-CAUS-PAST-3SG   me-0-ACC
    'He made me come today.'

(1163) a. *Bi   sita-i*   *mamasa-la-waŋ-ki-mi.*
           me   child-REF   wife-V-CAUS-PAST-1SG
           'I made my son marry.'
     b. *In'ei*   *igi:*   *ugi-wen-e-ini.*
         dog   tail.REF   move-CAUS-0-3SG.
         'The dog wags its tail.'

In the Northern dialect as recorded by Kormušin, the Accusative marking of
the direct object is not regular (4.2.2.2). The causee-object may remain
morphologically unmarked. This, however, does not influence its syntactic
status.

(1164) a. *E-zi-de*   *su:le-wen-e*   *ajan-zi*
           NEG-IMP.2SG-FOC   be.ill-CAUS-0   good-INST
           wakca-wan-za-i ...   *kesi*   *bi-wen-ze-i.*
           hunt-CAUS-SUBJ-2SG   luck   be-CAUS-SUBJ-2SG
           'Don't make them ill, make them hunt well, make them have luck.'
           (K 123)
     b. *Aziga-ziga*   *iñe-we-si-ze-mi.*
         girl-PL   laugh-CAUS-IM-SUBJ-1SG
         'I will make the girls laugh ' (K 105)
     c. *Su: käu-käu*   *čalugo-won-o*   *ima:-wa-da*
         son all-all   melt-CAUS-0   snow-ACC-FOC
         čalugo-won-o   *o:kto-do*   *bagdi-wan-a.*
         melt-CAUS-0   grass-FOC   grow-CAUS-0
         'The son melts everything, it melts the snow, it makes the grass
         grow.' (K 124)
     d. *Zuge-we-de*   *čalu-wen-e-mi*   *ima:-wa-de*
         ice-ACC-FOC   melt-CAUS-0-1SG   snow-ACC-FOC
         čalu-wen-e-mi   *o:kto-de*   *bagdi-wan-a-mi*
         melt-CAUS-0-1SG   grass-FOC   grow-CAUS-0-1SG
         ni:-we   *xaŋka-wan-a-mi.*
         man-ACC   puff-CAUS-0-1SG
         'I melt the ice and the snow, I make the grass grow, I make people
         pant.' (K 124)

Like other direct objects (15.2), the direct object-causee is easily deleted under
coreference with a previously mentioned element.

(1165) a.   *Ogdö*   *do-lo-ni*   *ŋua-wan-za-fi.*
           coffin   inside-LOC-3SG   sleep-CAUS-SUBJ-1PL.IN
           'We will put him to sleep in a coffin.' (K 190)

      b.   *Jegdige*   *ba:*   *xo:n-dule-ni*   *ule:-ni*
           hero   place   top-LOC-3SG   dig.PAST-3SG
           agdu,   *uta-la*   *ŋua-waŋ-ki-ni.*
           hole   that-LOC   sleep-CAUS-PAST-3SG
           'The hero dug a hole in the forest and put them to sleep there.'
           (K 132)

      c.   *Susa-gi-ze-mi*   *bi,*   *lä*
           escape-REP-SUBJ-1SG   me   very
           uktu-wen-zeŋe   *tigde.*
           wet-CAUS-FUT   rain
           'I must escape, (otherwise) the rain will make me wet through.'

      d.   *Nada-ma*   *neŋi*   *nada-ma*   *dogbo-ni*
           seven-ACC   day   seven-ACC   night-3SG
           siki-si-e-ni   *mamasa-i,*   *siki-e-k,*
           wash-IM-PAST-3SG   wife-REF   wash-PAST-EXPR
           aja-zi   *teti-gi-wen-e:-k.*
           good-INST   dress-REP-CAUS-PAST-EXPR
           'He was washing his wife for seven days and seven nights, he
           washed her and dressed her well.'

16.1.3.2.2. The verb *edewen-* 'make'

The Causative verb *ede-wen-* 'make' is derived from the copula verb *ede-* 'become' (17.1.3.2). Like the copula in a regular copular construction (Chapter 17), this verb is preceded by a predicative adjective. In other respects the Causative construction behaves in the usual way.

(1166) a.   *Coŋku-we*   *sagdi*   *ede-wen-e-je.*
           window-ACC   big   become-CAUS-0-IMP.2SG
           'Make the window big.'

      b.   *Aja*   *ede-weŋ-ki-ti.*
           good   become-CAUS-PAST-3PL
           'They made it nice.'

      c.   *Bi* *tege-we*   *umac'a*   *ede-weŋ-ki-mi.*
           me gown-ACC   short   become-CAUS-PAST-1SG
           'I made the gown shorter.'

d.   *Ilien-ti*   *aŋa-ni*   *belem   sagdi   we:-i*
   three-ORD   year-3SG   more   large   garden-1SG
   ede-weŋ-ki-mi.
   become-CAUS-PAST-1SG
   'The third year I made my garden (even) larger.'

16.1.3.3. Transitive verbs

Causative verbs derived from transitives are at least three-place. In this construction, the agent argument corresponds to the grammatical relation of subject, the patient/theme corresponds to the direct object noun phrase and is encoded by the Accusative case. There are two options for encoding the causee argument.

16.1.3.3.1. Direct object causee

The causee may be encoded by the Accusative noun phrase in the same way as the causee in intransitive Causative constructions (16.1.4.2). In this case, the construction appears to include two Accusative noun phrases ("double object", cf. 16.2.1).

(1167) a.   *Sita-wa-ni*   *tege-we-ni*
      child-ACC-3SG   gown-ACC-3SG
      teti-gi-weŋ-ki-ni.
      wear-REP-CAUS-PAST-3SG
      'She put a dress on a child.'
   b.   *Bi   aziga-ŋi-we-i*   *tege-we*
      me   girl-AL-ACC-REF   gown-ACC
      teti-gi-ne-wen-e-i.
      dress-REP-DIR-CAUS-0-1SG
      'I am going to put a gown on my daughter.'
   c.   *Jegdige*   *eze*   *lauzi-wa-ni*   *lala-wa*
      hero   czar   servant-ACC   porridge-ACC
      diga-waŋ-ki-ni.
      eat-CAUS-PAST-3SG
      'The hero fed porridge to the czar's servant.' (SKX 112)

Both the causee-object (1168) and the non-causee object (1169) may be coreferentially dropped from the clause.

(1168) a.   *Zeu-we*   *diga-waŋ-ka-i?*
     food-ACC   eat-CAUS-PERF-2SG
     'Did you feed (him) with food?' (K 170)

   b.   *Uta-digi*   *tene*   *ag'a-ni*   *mamasa-ni*   *men-e*
     that-ABL   CONT   brother-3SG   wife-3SG   REF-0
     tege-we   *teti-weŋ-ki-ni*
     gown-ACC   dress-CAUS-PAST-3SG
     diga-la:-ni   *bue-ni.*
     eat-PURP-3SG   he-3SG
     'Then the wife of her elder brother made her put on the clothes so
     that she (could) eat.' (K 140)

   c.   *Bi*   *begdi-we-i*   *akinda-waŋ-ka-i.*
     me   leg-ACC-1SG   wound-CAUS-PERF-2SG
     'You made me wound my leg.' (K 150)

(1169) *Tukca-ziga*   *olokto:-ti*   *zeu-we,*   *jegdige-we*
    hare-PL   cook.PAST-3PL   food-ACC   hero-ACC
    diga-waŋ-ki-ti.
    eat-CAUS-PAST-3PL
    'The hares cooked the food and fed the hero.' (K 155)

16.1.3.3.2. Indirect object causee

The second option for the causee of the transitive constructions is to be
encoded as the Dative indirect object, cf.:

(1170) a.   *Min-du*   *guas'a*   *timana*   *gazi-wen-e-je.*
     me-DAT   bitch   tomorrow   take-CAUS-0-IMP.2SG
     'Let me take the bitch tomorrow.' (K 113)

   b.   *Ma:ma,*   *min-du*   *gazi-wen-ze-i*
     grandmother   me-DAT   take-CAUS-SUBJ-2SG
     in'ei-we   *timana.*
     dog-ACC   tomorrow
     'Grandmother, let me take the dog tomorrow.' (K 110)

   c.   *Mafa*   *mäwa-ni*   *a:nta-du*   *e-zu*
     bear   heart-3SG   woman-DAT   NEG-IMP.2PL
     ze-wen-e.   *J'e-we-ni-de*
     eat-CAUS-0   what-ACC-3SG-IND
     e-zu   *ze-wen-e.*
     NEG-IMP.2PL   eat-CAUS-0
     'Don't let women eat the bear's heart. Don't let (them) eat
     anything.' (K 131)

d.   *Bi   men-e*   *sita-du-i*   *suala-wa*
     me   REF-0   son-DAT-REF   ski-ACC
     teti-weŋ-ki-mi.
     dress-CAUS-PAST-1SG
     'I put skis on my son.'

16.1.3.3.3. Direct object causee vs. indirect object causee

The basic difference between the transitive causative constructions with the
direct object causee, on the one hand, and the indirect object causee, on the
other hand, is that the former have only a factitive meaning while the latter
allow both a factitive and permissive meaning.

(1171) a.   *Bi   Iwana-wa*   *bu-gi-weŋ-ki-mi*
            me   Ivan-ACC   give-REP-CAUS-PAST-1SG
            kusige-we   *abuga-du.*
            knife-ACC   father-DAT
            'I made Ivan give the knife to his father.'
       b.   *Bi   bu-gi-weŋ-ki-mi*   *Ivana-du*
            me   give-REP-CAUS-PAST-1SG   Ivan-DAT
            kusige-we   *abuga-du.*
            knife-ACC   father-DAT
            'I made/let Ivan give the knife to his father.'

Other examples that make clear the permissive meaning of constructions with
the Dative causee are:

(1172) a.   *Sä:-wa*   *ni-du-de*   *e-zi*
            shoulder-ACC   who-DAT-IND   NEG-IMP.2SG
            diga-wan-a.
            eat-CAUS-0
            'Don't let anybody eat the (animal's) shoulder.'
       b.   *Bi   exi-mi*   *ñ'aula-wa*   *činda-du*
            me   sister-1SG   child-ACC   bird-DAT
            ña:ma-wan-a:-ni.
            curse-CAUS-PAST-3SG
            'My sister let the bird curse the children.' (K 168)
       c.   *Bi   Iwana-du*   *kusige-we*
            me   Ivan-DAT   knife-ACC
            bu-weŋ-ki-mi   *abuga-du.*
            give-CAUS-PAST-1SG   father-DAT
            'I asked Ivan to give a knife to my father.'

d. *Ni-du-de*   *e-ẕi-u*   *sa-wan-a.*
   who-DAT-IND   NEG-IMP-2PL   know-CAUS-0
   'Don't let anybody know this.'

Even when constructions with an indirect object causee have a factitive interpretation, they seem to differ from constructions with a direct object causee in the degree of activity of the causee argument. The indirect object encodes a less active and often less volitional participant than the direct object. Compare (1173a) and (1173b) and also (1174) where the translation suggests that the causee was actively involved in the action (an indirect object causee is not possible in this case).

(1173) a. *Min-e-we*   *diga-wan-a-ja.*
      me-0-ACC   eat-CAUS-0-IMP.2SG
      'Make me eat.'
   b. *Min-du*   *diga-wan-a-ja.*
      me-DAT   eat-CAUS-0-IMP.2SG
      'Feed me.' (meaning: give food to me)

(1174) *Eniŋe*   *sita-i*   *cei-we*   *diga-waŋ-ki-ni.*
     mother son-1SG   soup-ACC   eat-CAUS-PAST-3SG
     'The mother forced her son to eat soup.'

With verbs that do not presuppose the active involvement of the causee argument, such as *ise-wen-* 'make see, show', *sa-wan-* 'make know, inform', only the indirect object causee is acceptable.

16.1.3.4. Passive Causative constructions

In transitive causative constructions both the causee argument (1175a) and the regular direct object (1175b) can passivize.

(1175) a. *Si* *belesi-e-i*   *daliŋkadi*   *bi*   *oño-wo*
      you help-PP-2SG   thanks   me   letter-ACC
      oño-u:ŋ-ki-mi.
      write-PAS.CAUS-PAST-1SG
      'Thanks to your help I wrote the letter (literally: I was caused to write the letter).'
   b. *Ñ'aula-wa*   *činda-du*   *ña:ma-u-wan-a:-ni.*
      child-ACC   bird-DAT   curse-PAS-CAUS-PAST-3SG
      'Children were cursed by the bird (literally: caused to be cursed).'
      (K 16832)

The indirect object causee does not passivize, like other indirect objects (15.2), cf.:

(1176) *Činda-wa   ñ'aula-wa   ña:ma-u-wan-a:-ni.
      birdy-ACC   child-ACC   curse-PAS-CAUS-PAS-3SG
      'The bird was caused to curse children.'

16.1.4. Decausative

By Decausative we will mean an originally two-place situation which is conceived without an agent participant, while the original direct object is considered to be performing the corresponding action by itself. The base verb, therefore, must take at least two arguments. Decausativization is encoded by the suffix *-ptA-/-ktA-* or *-kpi-* in a verbal form (8.2.1.3). Note that the semantically close Reflexive meaning (that is, when the agent (subject) is coreferential with another participant in the sentence) is not marked in the verbal form. We therefore do not consider it a voice operation, and discuss it in Chapter 22.

16.1.4.1. Decausative construction

Decausative verbs are obviously intransitive. The grammatical relation of the subject corresponds to their single argument. In Udihe only 3rd person subjects seem to be allowed in such constructions, and therefore the verb takes 3rd person agreement affixes. The independent character of the action may be emphasized with the emphatic reflexive pronoun *men-e* 'by itself' (1178).

(1177) a. *Mäna*   *mantila-pta:-ni*   (or: *mantila-kpi-e-ni*).
         flower   spill-DEC.PAST-3SG   spill-DEC-PAST-3SG
         'The flower spilled out.'
     b. *Čaja*   *olokto-kpi:-ni.*
         tea   cook-DEC-3SG
         'The tea is being cooked.'
     c. *Ogbö*   *eni-ni*   *xokto-lo-ni*
         elk   female-3SG   path-LOC-3SG
         nodo-pto:-ti.
         lose-DEC.PAST-3PL
         'They were lost on the path of the female elk.' (K170)
     d. *Bue-ni*   *mede-mpe-ne:-ni*   *uti*   *getu-le.*
         he-3SG   learn-DEC-DIR.PAST-3SG   that   PL-LOC
         'He went to get informed by them.'

(1178) a. *Wopti*   *men-e*   *kimpigi-pte:-ni.*
           door   REF-0   close-DEC.PAST-3SG
           'The door closed by itself.'
      b.   *Conku*   *men-e*   *nientile-pte:-ni.*
           window   REF-0   close-DEC.PAST-3SG
           The window closed by itself.'

16.1.4.2. Perception verbs

The verbs *ise-pte-* 'be seen', *düi-pte-* 'be heard', and *b'a-pta-/b'a-kta-* 'smell'
(intransitive) are used especially frequently (1179). Particularly frequent they
are in the Habitual aspect either as a bare stem (1180) or as the Present active
participle (1181).

(1179) a. *Zugdi*   *ise-pte-li-ge.*
           house   see-DEC-INC-PERF
           'The house became seen.'
      b.   *Abdu-ni*   *düi-pti:-ni*   *ceŋer-ceŋer.*
           necklace-3SG   hear-DEC-3SG   INTER-INTER
           'Her necklace is heard to be ringing.' (K 160)
      c.   *Bui*   *xokto-ni*   *ge:-zi*   *ise-pte-ini.*
           animal   trace-SG   bad-INST   see-DEC-3SG
           'The animals' traces are badly seen.'
      d.   *Roza*   *xu:-ŋi-ni*   *b'a-kta-ini*   *ketu*   *aja.*
           rose   smell-AL-3SG   smell-DEC-3SG   very   good
           'The rose smells very good.'

(1180) a. *J'eu-de*   *ise-pte.*
           what-IND   see-DEC
           'Nothing is seen.'
      b.   *Aja*   *düi-pte.*
           good   hear-DEC
           'It is well heard.'

(1181) *Neŋu-i*   *sula-ni čomö-ni*   *ise-pte-i*
        younger.sibling-2SG   ski-3SG tip-3SG   see-DEC-PRP
        bubu.
        EV
        'The tips of your younger brother's skis are seen.' (K 128)

16.1.5. Reciprocal

Reciprocal derivation is marked by the suffix *-masi-* attached to the verb (8.2.1.1). The Reciprocal verb in Udihe always takes Plural agreement inflections, although the subject need not have a Plural form.

In the Reciprocal construction an action is performed by two or more participants upon one another. The situation must have at least two animate participants and be symmetrical in the sense that they are both involved in it in the same way. Both transitive and intransitive verbs can reciprocalize provided they are not subject to any semantic constraints. Both the second argument (the direct object) and the third argument (the indirect or oblique object) can be involved in the reciprocal relation. Reciprocal constructions fall into three types: (i) reciprocalization of the direct object of two-argument transitive verbs; (ii) reciprocalization of the indirect object of two-argument intransitive verbs; and (iii) reciprocalization of the indirect object of three argument transitive verbs. Reciprocalization of the first and the second argument (the direct object) leads to detransitivization of the base verb. Morphological Reciprocals are not used for reciprocalization of a possessor or adjuncts; reciprocalization of these elements does not involve a change in the verbal form (see 22.4).

The only possible syntactic antecedent to all types of reciprocalization is the subject. Reciprocal structures without an overt antecedent occur only if the subject is dropped under coreference. Across-clause reciprocalization is impossible.

16.1.5.1. Reciprocalization of the indirect object

16.1.5.1.1. Intransitive verbs

As mentioned in 8.2.1.1, some intransitive verbs can undergo morphological reciprocalization with the suffix *-masi-*. Examples (1182) present two-argument intransitive verbs: the verbs *xuli-* 'go, visit' and *bagdi-* 'live', which take the Locative argument; and the verb *zima-* which takes example the Instrumental.

(1182) a. *Nua-ti   tutulu   xuli-masi:-ti.*
          he-3PL   always   walk-REC-3PL
          'They always visit each other (go to each other).'

    b. *Nua-ti   utebe   bagdi-masi:-ti.*
          he-3PL   so   live-REC-3PL
          'So they live at each other's place (alternately).'

    c. *Nua-ti   men-e   do-lo   zima-si-masi:-ti.*
          he-3PL   REF-0   inside-LOC   visit-IM-REC-3PL
          'They visit each other.'

16.1.5.1.2. Transitive verbs

In (1183) we present examples of reciprocalization of the third argument of three-place transitive verbs. The reciprocalized argument is the Locative (1183a), the Lative (1183b) and (1183c), and the Ablative (1183d).

(1183) a.   *Nua-ti*   *men-e*   *do-lo*   *tutulu*   *gele-masi:-ti*
           he-3PL   REF-0   inside-LOC   always   ask-REC-3PL
           kusige-we.
           knife-ACC
           'They always ask each other for a knife.'

      b.   *Nua-ti*   *men-e*   *do-lo*   *zeu-we*
           he-3PL   REF-0   inside-LOC   food-ACC
           nexu-masi:-ti.
           bring-REC-3PL
           'They bring each other food.'

      c.   *Kaja-sa-masi-e-ti.*
           send-EXP-REC-PAST-3PL
           'They were sending (her) to one another.' (K174)

      d.   *Lepeška-we*   *titi-masi:-ti.*
           flat.cake-ACC   take.away-REC-3PL
           'They take the flat cake away from each other.'

16.1.5.2. Encoding of the counteragent participant

In the Reciprocal construction the secondary argument (the counteragent of mutual action) can be expressed in several formal ways, the choice generally depending on the degree of activity of the two participants in the situation described. The encoding of the counteragent participant is formally similar to the encoding of the secondary argument of non-reciprocal symmetrical verbs (14.3.4.2, 16.2.3). They may both be encoded by the Instrumental noun phrase, the Plural subject, a coordinated structure, or the postpositional phrase with the postposition *mule* 'with'. The difference, however, is in the verbal form: morphological reciprocals are always in the Plural, while non-reciprocal symmetrical verbs take a Plural agreement affix only if the subject is formally Plural.

16.1.5.2.1. Instrumental noun phrase

The secondary participant may be encoded as an Instrumental noun phrase. This is generally possible when the reciprocal situation is initiated or controlled

by the first participant (the Nominative subject in the singular) who is therefore regarded as more active than the second participant.

(1184) a.   *Sama*   *ogzo-zi*   *b'a-si-masi-e-ti.*
            shaman   spirit-INST   find-IM-REC-PAST-3PL
            'Shamans used to meet spirits.'
       b.   *Gioŋka*   *Pioŋka-zi*   *zogzo-masi-e-ti.*
            Gionka   Pionka-INST   quarrel-REC-PAST-3PL
            'The Gionkas had a quarrel with the Pionkas.'
       c.   *Ag'a*   *min-zi*   *kusige* *dieleni*
            brother   me-INST   knife   because
            ñagda-masi-e-mu.
            curse-REC-PAST-1PL.EX
            'My brother had a row with me because of the knife.'
       d.   *Pakula*   *tukca-zi*   *ña:-masi-e-ti.*
            Pakula   hare-INST   curse-REC-PAST-3PL
            'Pakula had a row with the hare.'

16.1.5.2.2. Plural

If the subject is in the plural, the situation is perceived with the equally active participation of both participants, cf.:

(1185) a.   *Gida-zi*   *gida-masi-e-ti.*
            spear-INST   spear-REC-PAST-3PL
            'They were throwing spears at each other.' (K 177)
       b.   *B'ata-ziga*   *saŋtu-masi-e-ti.*
            boy-PL   fist-REC-PAST-3PL
            'The boys beat each other with fists.'
       c.   *Nua-ti*   *ñuga-si-masi:-ti.*
            he-3PL   kiss-IM-REC-3PL
            'They are kissing each other.'

The secondary participant can be specified by the postpositional phrase with the postposition *mule* 'with' (on this postposition see 10.2.2.2.4) if two participants are related by close family association.

(1186) *Nua-ti* *sita*   *mule*   *ña:-masi-e-ti.*
        he-3PL son   with   curse-REC-PAST-3PL
        'They had a row with his son.'

16.1.5.2.3. Several participants

The Reciprocal situation does not necessarily involve only two participants. without an additional indication the construction is in fact ambiguous and may refer to more than two participants, although two seems to be the default interpretation. When it is necessary to emphasize the number of participants, an overt numeral can be used. In (1187) the Reciprocal situation pertains to three participants, as is clear from the nearest left context. In (1188) the number of participants is overtly indicated by the Collective numerals *di:n-tuŋe* 'four' and *zuŋe* 'two, both'.

(1187) *Omo   ni: zu: ni:-we   b'a-si-e-ni.*
     one man   two   man-ACC   find-IM-PAST-3SG
     Teluŋu   teluŋu-masi-e-ti.
     story   story-REC-PAST-3PL
     'One man met two men. They told stories to each other.' (K 175)

(1188) a.   *Di:n-tuŋe   sa-masi:-ti.*
         four-COL   know-REC-3PL
         'The four people know each other.'
    b.   *Nua-ti   zuŋe   jexe-masi:-ti.*
         he-3PL   both   sing-REC-3PL
         'Two of them sing to each other.'
    c.   *Zuŋe   zuza-masi-e-ti.*
         both   quarel-REC-PAST-3PL
         'They two were quarrelling.'
    d.   *Zuŋe   ima-si-masi-e-ti.*
         both   tell-IM-REC-PAST-3PL
         'They tell tales to each other.'

16.1.5.3. Additional Reciprocal markers

The Reciprocal construction with the Plural subject may include the Accusative Reciprocal pronoun *mef(e)i(-mef(e)i)* (9.3). It is especially common in the reciprocalization of the Accusative argument of transitive verbs (1189), but is not limited to these cases. The formally Accusative Reciprocal pronoun may indicate that an argument other than the direct object is involved in the reciprocal relation, for example, the initial Instrumental object (1190a) or Locative object (1190b). However, it is by no means obligatory.

(1189) a.   *Bu   mefei-mefei   bele-masi-u.*
         we.EX   REC-REC.ACC.PL   help-REC-1PL.EX
         'We help each other.'

b. *Bu   mefei-mefei*   *nodo-masi-e-mu.*
   we   REC-REC.ACC.PL   lose-REC-PAST-1PL.EX
   'We lost each other.'

(1190) a. *Nua-ti   mefei-mefei*   *ŋele-masi:-ti.*
          he-3PL   REC-REC.ACC.PL   be.afraid-REC-3PL
          'They are afraid of each other.'
       b. *Nua-ti   mefei-mefei*   *xuli-masi:-ti.*
          the-3PL   REC-REC.ACC.PL   go-REC-3PL
          'They visit each other.'

Similarly, the reciprocal relationship may be additionally marked by the postpositional expression *men-e do-lo* literally 'within themselves', cf.:

(1191) *Men-e   do-lo*   *aju-masi:-ti.*
       REF-0   inside-LOC   love-REC-3PL
       'They love each other.'

The expression *men-e do-lo* frequently occurs in the reciprocalization of the third argument of transitive verbs, see examples in 16.1.6.1.2.

16.2. Valence changes not driven by voice

This section focuses on sentence constructions that demonstrate an alternative distribution of the semantic roles over grammatical relations in comparison to the valence patterns described in Chapter 14. Since the verbal form remains unchanged, it is not treated as a voice-related alternation.

16.2.1. Double object construction

Udihe possesses a double object construction that acts as alternative means of encoding the direct object. From the material at our disposal it is difficult to estimate the regularity of this construction; neither can we tell how it is motivated from the point of view of semantics or information structure. On grammatical relations in double object constructions see 15.2.

16.2.1.1. "Possessive" double object construction (possessive raising)

This is another way of expressing the object relationship for a possessive noun phrase. A possessive noun phrase in the Accusative, for example *uti cobo-wo-ni* 'its claws' <that claw-ACC-3SG>, encodes the grammatical relation of the direct object within a single object construction. Alternatively,

the same relationship can be expressed by a double object construction in which the possessor raises to the argument role. The Accusative marks two noun phrases that correspond to the possessive modifier and the head noun of the original possessive noun phrase; the possessive marking is preserved (*uta-wa* 'that' and *cobo-wo-ni* 'claws').

This type of double object construction will be referred to as "possessive". It seems to appear when the relationship between two objects can in principle be encoded by a possessive noun phrase. Normally the relationship between the modifier and the head noun is that of inalienable possession, involving body parts and the like (1192) or the relationship between a measurement and its object (1193). For example, in (1193a) the two objects can be interpreted as components of the possessive of the noun phrase *zugdi-ziga sagdi-le-we-ti* 'the size of the houses.'

(1192) a.   *G'ai-wa*   *wa:-k,*   *cobo-wo-ni*
              crow-ACC   kill.PAST-EXPR   claw-ACC-3SG
              xuaj-e-k,   *to:-wo*   *ila:-k*
              cut-PAST-EXPR   fire-ACC   kindle.PAST-EXPR
              dag'a-si   *cobo-wo-ni*   *uta-wa.*
              burn.PERF-PC.SS   claw-ACC-3SG   that-ACC
              'They kill a crow, cut its claws, kindle the fire, and burn its claws.'

     b. *Uta-wa-da*   *dili-we-ni*   *piokoli-e-ni.*
              that-ACC-FOC   head-ACC   twist-PAST-3SG
              'He twisted its head.' (SKX 108)

     c. *Imexi*   *ule-we*   *xu-me-ni*
              new   meat-ACC   smell-ACC-3SG
              b'an-zi: *kogdo-li-eni.*
              get.PP-INST.SS   scream-INC-PAST-3SG
              'He smelt the smell of the fresh meat and started screaming.'
              (SKX 206)

     d. *To:*   *egelie*   *xuli-mi*   *seŋkie-we*
              fire   around   walk-INF   ledum-ACC
              saŋña-wa-ni   *ŋiei-si-mi.*
              smoke-ACC-3SG   smell-IM-INF
              'He is walking around the fire smelling the smoke from the ledum.'
              (SKX 214)

(1193) a.   *Ei*   *zugdi-ziga-we*   *sagdi-le-we-ti*
              this   house-PL-ACC   big-N-ACC-3PL
              adi   *metra-zi*   *wo:-ti?*
              how.many   meter-INST   make.PAST-3PL
              'How many meters wide did they make these houses?'

b. *Ag'a-ni*   *mamasa-ni*   *omo*   *miŋga*
    elder.brother-3SG   wife-3SG   one   thousand
    da:-wa   *xuku-we*   *zaw'a-si*
    fathom-ACC   rope-ACC   take-PC.SS
    zugdi-we   *moŋgolie-moŋgolie*   *xeke:-ni.*
    house-ACC   around-around   tie.PAST-3SG
    'The elder brother's wife took a thousand fathom rope and tied it
    around the house.' (SKX 110)

16.2.1.2. "Non-possessive" double object construction

The non-possessive double object constructions appear when the noun phrase
that corresponds to the second object plays a case role (normally, that of
location) within the alternative single object construction. The following verbs
allow a non-possessive double object construction:

(1194) *nede-*   'put something on something'
       gene-   'bring something from something'
       zawa-   'take something from something'
       kuŋgede-   'pour something on something'
       teti-   'put something on somebody'
       xeke-   'tie something on something'
       gazi-   'bring something from something'
       (j)uŋkäla-   'carry something or somebody on a sledge'
       oño-   'put ornaments on something'
       teu-/tu:-   'fill something with something; keep something in
                        something'

These verbs either take a third Locative argument or are compatible with the
Locative adjunct. Alternatively, the initially Locative participant may be
encoded as the second object, cf. (1195a) and (1195b).

(1195) a. *Bi*   *takana-la*   *moloko*   *tu:wo:-mi.*
           me   glass-LOC   milk   fill.PAST-1SG
           'I filled the glass with milk.'
       b. *Bi*   *mulexi:*   *täs(i)*   *uli-we*   *tu:wo:-mi.*
           me   bucket.REF   very   water-ACC   fill.PAST-1SG
            'I filled my bucket with water.'

In this type of double object construction, neither of the two objects bears a
possessive affix.

(1196) a.   *Xaulie*   *e-zi-u*   *kuŋgede*   *min-e-we*
           please   NEG-IMP-2PL   pour   me-0-ACC
           uli-we.
           water-ACC
           'Please do not pour water on me.'

       b.   *Xek'e*   *uti*   *toŋofu-ziga*   *aŋi-we*   *xuku*
           tie.PERF   that   loop-DIM   IND-ACC   rope
           mei-we-ni.
           strong-ACC-3SG
           'He tied the small loops on a strong rope.'

       c.   *Omo-mo*   *gene-jie*   *uta-wa.*
           one-ACC   bring-IMP.2SG   that-ACC
           'Bring one of them.'

       d.   *Ei*   *tege-we*   *udie*   *oño-wo-ni*
           this   gown-ACC   Udihe   ornament-ACC-3SG
           oño-si-e-ti.
           decorate-IM-PAST-3PL
           'They decorated this gown with Udihe ornaments.'

       e.   *Uta-wa*   *teu-me-ni*   *teti-e-ti*   *sita-fai.*
           that-ACC   all-ACC-3SG   put-PAST-3PL   child-REF.PL
           'They put all this on their child.' (SKX 114)

In many cases the relation between two direct objects is that of content and container.

(1197) a.   *Eme-mi*   *mafasa*   *alu-i-we-ni*
           come-INF   old.man   serve-PRP-ACC-3SG
           uniŋa-wa   *zawa-mi*   *diga-mi*   *ča:la-in(i).*
           spoon-ACC   take-INF   eat-INF   want-3SG
           'She came, took a spoonful of what the old man had served, ate it
           and agreed.'

       b.   *Ulikte-we*   *uli-we-ni*   *sigbi:-ni.*
           shaman.lard-ACC   water-ACC   squeeze-3SG
           'He squeezes water from the lard.'

       c.   *Tuxi-we*   *b'ata*   *Kičo-wa*   *uŋkäla-mi.*
           sledge-ACC   boy   Kicho-ACC   carry-INF
           'He was carrying the sledge with the boy Kicho.' (SKX 210)

       d.   *Zali-la*   *bi:*   *namuŋku-we*   *imo:-wo*
           shed-LOC   be.PRP   basket-ACC   lard-ACC
           gazi-gi-se:-ni.
           bring-REP-EXP.PAST-3SG
           'He brought a basket of lard from the shed.' (SKX 80)

e. *Sugzä:-wa* *omo* *ob'o-wo* *gazi-e-ni.*
fish-ACC   one   hook-ACC   bring-PAST-3SG
'She brought one hook of fish.' (K 126)

f. *Bi:-si-ni* *zugu* *bua-digi*
be-PC.DS-3SG   otter   place-ABL
ilakta-ŋie-ni *omo* *uge-we* *sugzä-wa*
appear-REP.PAST-3SG   one   hook-ACC   fish-ACC
gazi-na:-da.
bring-PC.SS-FOC
'After a while the otter appeared again from the outside having brought one hook of fish.' (SKX 74)

g. *Banza* *keŋku-we-ni* *moloko-wo*
bottle   empty-ACC-3SG   milk-ACC
teu-si-se-we *wende-le:-mi.*
fill-IM-PP.PAS-ACC   throw.PAST-SING-1SG
'I threw away the empty milk bottle (literally: which they fill with milk).'

h. *Wakča-i* *ni:* *tuxi* *täsi* *ule-we*
hunt-PRP   man   sledge   very   meat-ACC
teu-ge-si *uŋkäla:-ni.*
fill-PERF-PC.SS   carry.PAST-3SG
'The hunter filled the sledge full of meat and carried it.' (SKX 210)

16.2.2. Destinative construction

In the Destinative construction the patient/theme argument of the transitive verb is represented by the destinative object. The destinative object is encoded by the Destinative possessive noun phrase. This is a type of possessive noun phrase in which the possessive modifier expresses a potential recipient (benefactive) of the object, while the head noun (the object itself) is marked by the Destinative case and the possessive affix that refers to the modifier. The destinative construction is not indicated by a change of verbal valency; the question whether the Destinative object takes a recipient valency or not will be left open. On the syntactic properties of the destinative object see 15.2.2.

Only certain two-argument transitive verbs, namely verbs of appearance and creation, take the Destinative object. A list of these verbs is presented in 14.3.1.3. Similar behavior is observed with the three-argument verb *wo:-* 'make' which belongs to type 14.4.2. Other argument transitive verbs do not allow a Destinative object. Personal pronouns do not take the Destinative case (9.1.1) and cannot function as Destinative objects.

16.2.2.1. Animate benefactive

In most cases the recipient of the Destinative object is an animate entity. It is referred to by personal affixes on the Destinative object (1198) and can also be overtly present in the clause (1199). When the potential recipient is coreferential with the subject of the same clause, this is marked by reflexive possessive affixes on the Destinative object (1200).

(1198) *Bi*   *nexu-ze-mi*   *diga-laga-ti*
     me   bring-SUBJ-1SG   eat-PURP-3PL
     zeu-ŋi-ne-ti.
     food-AL-DEST-3PL
     'I will bring them food so they can eat.'

(1199) a. *Bi*   *zugdi-ne-i*   *wo:-iti.*
          me   house-DEST-1SG   make-3PL
          'They are building a house for me.'
      b. *Kuliga*   *zugdi-ne-ni*   *wo-zo-fi*   *zugdi*
          snake   house-DEST-3SG   make-SUBJ-1PL.IN   house
          malu-le-ni.
          corner-LOC-3SG
          'Let us build a house for the snake in the corner of the house.'
      c. *Su*   *mafa-na-u*   *b'a:-mi.*
          you.PL   husband-DEST-2PL   find.PAST-1SG
          'I found a husband for you.' (K 137).
      d. *Aziga*   *mafa-na-ni*   *gen-e-mi.*
          girl   husband-DEST-3SG   fetch-0-1SG
          'I am going to fetch a husband for the girl.' (K 137)
      e. *Bi   nua-ti*   *uŋta-na-ti*   *wo:-mi.*
          me   he-3PL   boot-DEST-3PL   make.PAST-1SG
          'I made them boots.'
      f. *Bi   uŋta-na-i*   *wo-jo.*
          me   boot-DEST-1SG   make-IMP.2SG
          'Make boots for me.'

(1200) a. *Xa:-na-mi*   *wo:-ni.*
          fish.trap-DEST-REF   make.PAST-3SG
          'He made a fish trap for himself.' (K 148)
      b. *Zeu-ŋi-na-fi*   *zawa:-ti.*
          food-AL-DEST-REF.PL   take.PAST-3PL
          'They took food for themselves.' (K159)
      c. *Aziga*   *zawa:-ni*   *tege-ne-mi.*
          girl   take.PAST-3SG   gown-DEST-REF
          'The girl took the gown for herself.' (K 159)

16.2.2.2. Inanimate goal

In (1201) examples of the inanimate modifier of the destinative object (meaning a general destination) are presented.

(1201) a. *Nua-ni*   *suese*   *xei-ne-ni*   *wo-ini.*
         he-3SG   axe   handle-DEST-3SG   make-3SG
         'He is making a handle for the axe.'

      b. *Ulikte*   *dili-ne-ni*   *kuliga*   *dili-ni*
          shaman.lard   head-DEST-3SG   snake   head-3SG
          duo-ni   *wo-iti.*
          shape-3SG   make-3PL
          'They make the head for the shaman lard in the shape of a snake's head.'

      c. *Bu-je*   *min-du*   *sugu*   *umu*
          give-IMP.2SG   me-DAT   awl   belt
          saŋa-na-ni   *wo-logo-mi*   *nixe-mi.*
          hole-DEST-3SG   do-PURP-1SG   do-1SG
          'Give me an awl, I am going to make holes in the belt (literally: for the belt).'

      d. *Bi*   *od'o-i*   *gäma-zi*   *kusige*
          me   grandfather-1SG   bone-INST   knife
          xei-ne-ni   *wo:-ni.*
          handle-DEST-3SG   make.PAST-3SG
          'My grandfather made a handle for a knife from the bone.'

      e. *Jaŋpa*   *umu-ne-ni*   *ña:-zi*
          shaman.belt   belt-DEST-3SG   skin-INST
          kuliga-wa   *o:-ti.*
          snake-ACC   make.PAST-3PL
          'They used to make a shaman's belt of skin (in the shape) of a snake.' (SK 689)

16.2.3. Symmetrical verbs

Verbs referring to a symmetrical naturally reciprocal situation (14.3.4.2) allow an alternative expression of the secondary argument. This second argument (counteragent) is commonly expressed by the Instrumental noun. This typically signifies that the subject participant is more "active" in the described situation than the counteragent participant. The alternative encodings are presented below. Normally they indicate that both participants are equally involved in the reciprocal event.

16.2.3.1. Postpositions *mule* and *zuŋe* 'with'

The comitative argument can be expressed by a postpositional phrase with the postposition *mule* or *zuŋe* 'with'. The postpositional phrase is in this case an argument and cannot be omitted. In this it differs from the formally identical comitative phrase functioning as an adjunct (10.2.2.2.4). Both the subject and the verb may be in the Singular or Plural.

The postposition *mule* is only possible with two participants who form a natural pair of relatives or close friends (a further description of such a postpositional phrase can be found in 10.2.2.2.4 and 13.5.1). The postposition *zuŋe* 'with, both' does not necessarily involve a close (family) relationship between the two participants (as *mule* does), see (1202). The subject may be coreferentially omitted (1203e). This blocks the possibility to analyze the comitative postpositions as coordinative elements.

(1202) a.   *Nua-ni*   *mamasa*   *mule*   *dekte-gi-e-ni.*
           he-3SG   wife   with   separate-REP-PAST-3SG
           'He and his wife separated again.'

       b.   *Nua-ti*   *mamasa*   *mule*   *dekti-gi-e-ti.*
           he-3PL   wife   with   separate-REP-PAST-3PL
           'He and his wife separated again.'

(1203) a.   *Iwana*   *Petra*   *zuŋe*   *mosoni:-ti.*
           Ivan   Peter   both   fight-3PL
           'Ivan and Peter are fighting.'

       b.   *Soŋgo*   *kuti*   *zuŋe*   *w'ali:-ti.*
           bear   tiger   both   fight-3PL
           'A bear and a tiger are fighting.'

       c.   *Bi*   *Iwana*   *zuŋe*   *xefisi-e-mu.*
           me   Iwan   both   discuss-PAST-1PL.EX
           'We had a discussion with Ivan.'

       d.   *Wasia*   *Wania*   *zuŋe*   *aziga*   *diele-ni*   *w'ali:-ti.*
           Vasya   Vanya   both   girl   because-3SG   fight-3PL
           'Vasya and Vanya are fighting because of the girl.'

       e.   *Gä:ŋa*   *neŋi-ni*   *w'ali:-ti*   *mafasa*   *zuŋe.*
           every   day-3SG   fight-3PL   old.man   with
           'Every day she is fighting with her husband.'

16.2.3.2. Plural

The secondary argument can be suppressed and replaced by the Plural subject cf.:

(1204) a.   *Zu: ni:*   *zä:*   *diele-ni*   *w'ali:-ti.*
        two man   money because-3SG   fight-3PL
        'Two men are fighting because of money.'

     b.   *Minti*   *b'agdi-e-fi.*
        we.IN   meet-PAST-1PL.IN
        'We met each other.'

16.2.4. Locative object construction

A few transitive verbs that normally take the Accusative direct object (14.3.1) may follow another pattern. Their second argument (the patient) can be encoded by the Locative noun phrase. Such an argument is normally the head of a possessive construction and denotes a body part. Examples of such verbs are:

(1205) *zawa-*   'take'   *juŋkäla-*   'pull'
       zawa-si-   'take hold of'   *ikteme-*   'bite'
       pakta(n)-   'hit'

If the second argument of these verbs is not a body part, the verbs are transitive; they take the Accusative argument and follow the valence pattern discussed in 14.3.1. On the other hand, examples such as those below cannot be characterized as possessor raising because the possessor keeps its syntactic function and does not get promoted to a verbal argument itself. The possessor noun phrase can in fact be absent from the sentence and be referred to only by the possessive affix, as shown in (1206a–1206e). In (1206f), however, it is overtly present in the Accusative form.

(1206) a.   *In'ei*   *bi*   *ŋala-la-i*   *ikteme-le:-ni.*
        dog   me   hand-LOC-1SG   bite-SING.PAST-3SG
        'The dog bit my hand.'

     b.   *Kanda*   *mafa*   *nua-ni*   *ku'ai-la-ni*
        Kanda   old.man   he-3SG   ear-LOC-3SG
        zawa:-ni.
        take.PAST-3SG
        'The old man Kanda caught it (a hare) by its ear.'

c. *Ono*   *dogbo-gi-e-ni*   *täk-täk*
   how   night-REP-PAST-3SG   fast-fast
   zawa-si-je   *tege-le-i.*
   hold-IM-IMP.2SG   gown-LOC-1SG
   'When the night comes, take hold of my gown.'

d. *Bugdi-le-ni*   *zawa-kca:-ni.*
   leg-LOC-3SG   take-INT.PAST-3SG
   'He wanted to take her leg.'

e. *Mafa*   *ŋala-la-ni*   *ikteme:-ni.*
   old.man   hand-LOC-3SG   bite.PAST-3SG
   'The bear bit his hand.' (K 176)

f. *Aziga-wa*   *ŋala-la-ni*   *juŋkäla-gi:.*
   girl-ACC   hand-LOC-3SG   pull-REP.PRP
   'He is pulling the girl by the hand.'

g. *Uta-wa*   *olou-zi*   *paktaŋ-ki-ni*
   that-ACC   hook-INSTR   hit-PAST-3SG
   ku'ai-la-ni   *p'ali-gda-da.*
   ear-LOC-3SG   black-FOC-FOC
   'He hit its black ears with the hook.' (SKX 256)

16.2.5. Agentless construction

In the active agentless construction the verb in a certain temporal form (normally, the Present or the Past, and only rarely the Future) takes the 3rd person Plural agreement affixes. The subject argument is absent and cannot be retrieved from the context because the agent has a generic or an indefinite interpretation. The encoding of other arguments does not differ from their encoding in direct voice constructions.

The meaning of the active agentless construction is thus very close, and sometimes identical, to the meaning of the Agentless Passive described in 16.1.2. Given this, one might suspect that the Impersonal active construction has developed under the influence of Russian syntax, where exactly the same construction is found. However, in the modern Udihe active and passive agentless sentences differ in two points: first, the active agentless construction does not seem to involve any modal implications; second, it is more likely to be used in a situation when the agent is referential but indefinite (that is, unknown to the speaker).

16.2.5.1. Referential indefinite agent

The examples below show the agentless construction with the indefinite interpretation of the agent, in the Present (1207a), Past (1207b), and Future (1207c).

(1207) a.   *Nua-ni   ja:-wa-ni   coptoli-e-ti.*
            he-3SG   eye-ACC-3SG   knock.out-PAST-3PL
               'They knocked out his eye.'
      b.   *Ei   tege-we   seule-zi   wo:-ti.*
            this gown-ACC   silk-INST   make.PAST-3PL
               'This gown is made of silk.'
      c.   *O-du   imexi   škola-wa   wo-zoɲo-ti.*
            this-DAT   new   school-ACC   make-FUT-3PL
               'Here they will build a new school.'

16.2.5.2. Generic agent

Examples of the generic interpretation of the agentless active construction follow; (1208) exemplifies the Present tense and (1209) the Past tense.

(1208) a.   *O-du   damisi:-ti.*
            this-DAT   smoke-3PL
               'One can smoke here.'
      b.   *'Ai-we   moxo-zi   umi:-ti.*
            vodka-ACC   cup-INST   drink-3PL
               'They drink vodka from the mug (this mug is for drinking vodka).'
      c.   *Ei   teŋku-le   te-iti.*
            this chair-LOC   sit-3PL
               'They sit on this chair.'
      d.   *Nua-ma-ni   Sweta-zi   gegbesi:-ti.*
            he-ACC-3SG   Sveta-INST   call-3PL
               'They call her Sveta.'
      e.   *Xeleba-wa   kusige-zi   xua-iti.*
            bread-ACC   knife-INST   cut-3PL
               'They cut bread with a knife.'

(1209) a.   *Anana   egdi-me   su:le:-ti.*
            long.ago   much-ACC   be.ill.PAST-3PL
               'Long ago people used to be ill a lot.'
      b.   *Anana   xeleba-wa   waca-ma   diga:-ti.*
            long.ago   bread-ACC   little-ACC   eat.PAST-3PL
               'Long ago people used to eat little bread.'

Chapter 17
Copular clauses

Copular clauses vary greatly in their meaning, but generally speaking they tend to denote some kind of state. In this chapter they are unified only on formal grounds: the predicate includes two components, the copula, and the predicative phrase as such. Such constructions will be called "copular constructions". The copular constructions described in this chapter differ from analytical verbal forms that may include the same copula (such as, for example, the Pluperfect). The latter are the regular grammaticalized means of forming analytical verbal inflectional categories and are described in Chapter 7, while the copular constructions are free syntactic combinations of the copula and a separate lexical item with a predicative value. Although the predicative element tends to immediately precede the copula it may be postposed, as below, or separated by other lexical material.

(1210) *Tehu-ni*   *bih-ni*   *eze-xi.*
       all-3Sg   be-3SG   master-PROP
       'Everybody has a master.' (SK 940)

In contrast, no other elements intervene between the two components of the analytical verbal category, and their order cannot be changed.

The copula in copular constructions behaves like regular verbs in the matrix or the subordinate clause with respect to word order and morphology. It takes the corresponding tense/aspect/mood or non-finite form and is marked for subject agreement. In section 17.1 we will describe the various types of copula.

Predicative elements of copular constructions usually belong to one of the following morphological classes: adjectives, nouns, some participles, or in rare cases, adverbs. In 17.2 different copular constructions are presented according to the valence patterns and further subtypes of the predicative element.

A number of copular constructions undergo formal restructuring due to processes of topicalization or focalization; these are addressed in 24.3.

17.1. Copula verbs

The copula *bi-* 'be' has a default interpretation; that is, it does not bring any additional meaning to the construction. The same copular is also used in all analytic verbal categories addressed in Chapter 7. It is present either in one of

its personal forms (17.1.1), or in the impersonal Habitual form (17.1.2). The choice between the personal or the impersonal form of the copula 'be' is determined by the formal and semantic type of the construction itself. In most copular constructions the copula 'be' can be substituted for other copulas that add some further meaning. These formally behave as the copula 'be', and are dealt with in 17.1.3.

17.1.1. Personal copula *bi-*

17.1.1.1. Forms

With a few exceptions, the personal copula *bi-* has all the tense/aspect/mood categories described for regular verbs in Chapter 7, as well as all the non-finite forms typical of regular verbs. The derivational suffixes (like those addressed in section 8.11), except for the Causative, do not normally attach to the verb *bi-*. The stem formation of the verb *bi-* is irregular, and is discussed in section 7.1.4. The examples of inflectional forms of the verb *bi-* can be found in the corresponding section of Chapter 7. In (1211) we present examples for copular clauses in which the personal copula 'be' takes different morphological forms: the Purposive Converb in (1211a), the Conditional Converb in (1211b), and the Causative Subjunctive in (1211c).

(1211) a. *Bi*   *begdi-le-i*   *ŋua-na-ja*   *ñamai*
         me   foot-LOC-1SG   sleep-DEST-IMP.2SG   warm
         bi-lege-ni.
         be-PURP-3SG
         'Sleep on my feet so that it will be warm.' (K 159).

     b. *Bogoi*   *dawa*   *bi-lisi-ni*   *ma:la*
         fat   salmon   be-CC-3SG   whole.dried.fish
         wo-iti.
         make-3PL
         'If the salmon is fat, they dry it.'

     c. *Kesi*   *bi-wen-ʒe-i.*
         luck   be-CAUS-SUBJ-2SG
         'Make it be lucky.' (K 123)

On negation of the personal copula, see 23.2.1.5.3.

17.1.1.2. Surface absence of the copula

In the 3rd person Present the copula is normally omitted, however its presence does not lead to ungrammaticality.

(1212) *Kuŋka   mo:-ni   c'o   sagdi   (bi:-ni).*
      cedar   tree-3SG   most   big   be-3SG
      'The cedar is the biggest tree.'

Other than in the 3rd person in the Present tense the personal copula *bi-* can occasionally be absent, as in (1213), but this is a fairly rare option.

(1213) *Si   kuliga,   bi   ni:.*
     you   snake   me   man
     'You are a snake and I am a man.'

In some constructions the personal copula must be overtly present, even in the 3rd person Present tense (17.2.2.2 and 17.2.2.6).

17.1.1.3. Function

The personal copula *bi-* is regular in all constructions with the Nominative (17.2.2) and Dative (17.2.3) subject, as well as in some subjectless constructions (17.2.1). All of them denote identification and some sort of temporary state.

17.1.2. Impersonal Habitual copula *bie*

17.1.2.1. Forms

The Habitual copula has the form *bie* in the Present tense and *(bie) bi-s'e* in the Past (see 7.4.2.3). It is impersonal and does not take any agreement affixes. The Present active participle of the Habitual copula 'be' is also *bie*. In other tense/mood categories it does not have any special forms, that is, the difference between the Habitual and the non-Habitual copula is neutralized. The Habitual copula cannot be omitted from the sentence.

    The Habitual copula is not negated with the regular negative verb like the personal verb 'be' (17.1.1), but with the impersonal negative copula *anči*. The two semantic types (existential and non-existential/habitual) are negated in formally distinct ways, see 23.2.1.5. In non-negative sentences there is no formal difference between the existential and non-existential Habitual copula constructions.

17.1.2.2. Function

In general, there are two basic meanings associated with the Habitual copula. First, it is used in existential constructions (17.2.1.3). Second, it is used in

constructions that normally express classification and describe a more or less permanent or inherent property (the Habitual meaning). The following copular constructions may express Habitual meaning by means of the Habitual copula: environmental construction (17.2.1.1), possessive construction (17.2.1.4), adverbial construction with postpositions (17.2.2.2.4), and construction with ideophones (17.2.2.6.2).

The difference between the personal and the Habitual copula can be illustrated by the following examples. Sentence (1214a) involves the Habitual copula *bie* and expresses the permanent characteristics of the subject, while (1214b) is produced in a situation when it characterizes the actual state at a definite moment of time (time of speech).

(1214) a.   *Uti*   *a:nta*   *gar-gar*   *bie.*
            this   woman   vivid-vivid   be.PRES.HAB
            'This woman is vivid.'
       b.   *Uti*   *a:nta*   *gar-gar*   *bi:-ni.*
            this   woman   vivid-vivid   be-3SG
            'This woman is vivid.'

17.1.3. Other copulas

Other copulas can replace the Habitual or non-Habitual copula *bi-*. They have a specialized meaning, and are therefore never dropped from the surface. Morphologically they behave completely like regular verbs.

These copulas are based on the verbal stem *e-* (or *o-* in the Northern dialect) 'be'. The stems apparently derived from this base are *ede-/odo-*, *esi-/osi-*, *egi-/ogi-*, *esigi-/osigi-*. Basically, all of them have the meaning 'become', and express the beginning of the state. In the present state of the language the derivational relationships between them are not entirely transparent and we prefer to treat them as separate verbs rather than distinct derivational forms of the same verb. According to Schneider (1936), the verb *o-do-/e-de-* belongs to morphonological class II (that is, *-de-/-do-* is a thematic element). As was mentioned in 8.1.1, in the modern language such verbs have moved into morphonological class I, and the thematic element has been reinterpreted as a part of the stem.

17.1.3.1. The copula *e-/o-* 'be'

The stem *e-/o-* 'be' is mostly characteristic of the Northern dialect. In the Southern dialect it is practically obsolete now, its functions being taken over by the copula *bi-* 'be'. In (1215) it is exemplified in the Subjunctive form.

(1215) *Bagdi:*   *getu*   *kese-lege-ti*   *sulikta*
       live.PRP   PL   suffer-PURP-3PL   intestine
       bede   *o:-zo.*
       like   become-SUBJ
       'Be like an intestine, so that the living people suffer.' (K 108)

17.1.3.2. The copula *ede-/odo-* 'become, appear, turn out'

The copula *ede-/odo-* 'become, appear, turn out' describes the beginning of a state and is fairly frequent. It is available for practically all copular constructions.

(1216) a.   *Nua-ni*   *sagdi*   *ede:-ni.*
         he-3SG   big   become.PAST-3SG
         'He became big.'
     b.   *Čagza*   *xegiezele*   *odo-li:-si-ni*
         white   below   become-INC-PC-3SG
         xenze-je.
         attack-IMP.2SG
         'If the white one ends up underneath (the other), attack.' (K 130)
     c.   *Maŋga*   *maŋga jegdige*   *ede:-ni.*
         strong   strong hero   become.PAST-3SG
         'He became a very strong hero.' (K 175)
     d.   *Ni: čo:*   *mahi*   *odo-i*   *ete-zeŋe-ni.*
         who most   strong   become-PRP   win-FUT-3SG
         'Who turns out to be the strongest will win.' (SK 1072)

If the predicative element corresponds to a Nominative noun phrase this copular can express the appearance.

(1217) a.   *Xulepte-we*   *xuisi: -ni*   *zäŋa*   *ede-ini.*
         ash-ACC   boil-3SG   soda   appear-3SG
         'If one boils ash, soda appears.'
     b.   *Di:*   *kusikta-la*   *ila*   *kusikta-wa*   *nede-mi*
         four   nut-LOC   three   nut-ACC   put-INF
         nada   *kusikta*   *ede-ini.*
         seven   nut   become-3SG
         'If you add three nuts to four nuts, there are seven nuts.'
     c.   *Ketu*   *uligdig'a*   *tege*   *ede:-ni.*
         very   beautiful   gown   become.PAST-3SG
         'A very beautiful gown appeared.' (K 162)

    d.   *Omo*   *zali*   *ede:-ni*   *ba:-la.*
         one   barn   become.PAST-3SG   place-LOC
         'A barn appeared outside.'

17.1.3.3. The copula *esi-/osi-* 'become'

The copula *esi-/osi-* with the meaning 'become' seems to be mostly characteristic of the Northern dialect.

(1218) a.   *Ke:-i*   *xoŋto*   *osi:-ni.*
            voice-2SG   different   become-3SG
            'Your voice became different.' (K 129)
       b.   *Käu-käu*   *su:le-i ni:*   *osi:-ti gune.*
            all-all   be.ill-PRP   man   be-3PL EV
            'Apparently all the people became ill.' (K 177)

17.1.3.4. The copulas *ogi-/egi-*, *osigi-/esigi-* 'remain; become'

The meaning 'remain' is rendered by attaching the repetitive suffix *-gi-* to the copula *esi-/osi-* 'become' or *e-/o-* 'be'. This suffix expresses the idea of a return to the previous stage (8.2.2.8). No examples of the suffix *-gi-*, which could augment the verb *ede-/odo-* 'become' (or to the copula *bi-* 'be') are found.

(1219) a.   *Teu*   *keŋkume*   *o-gi-e-ni.*
            all   empty   be-REP-PAST-3SG
            'They all remained empty.' (K 154)
       b.   *Ila-ta*   *o:-gi-e-ni.*
            three-REST   be-REP-PAST-3SG
            'Only three (of them) remained.' (K 187)

(1220) a.   *Di:*   *osi-gi-e-ni-ke,*   *enimec'e-le*
            four   remain-REP-PAST-3SG-FOC   light-CONT
           o-gi-e-ni.
           be-REP-PAST-3SG
           'When only four remained, it became easier (for him to carry them).' (K 187)
       b.   *Nua-ni*   *mur-mur*   *esi-gi-e-ni.*
            he-3SG   teethless-teethless   become-PAST-3SG
           'He was left without any teeth.'

c. *Eigaŋkini   sagdinta   wac'a esi-gi-e-ni.*
    now   old.man   little become-REP-PAST-3SG
    'These days only a few old men remain.'

The construction may have an existential interpretation, cf. (1220c). Then it is negated with the impersonal negative word *anči*, which precedes the copula, cf.:

(1221) *Eitene   dawa   anči   esi-gi-e-ni.*
       now   salmon no   become-REP-PAST-3SG
       'There is no salmon left now.'

17.2. Copular constructions

A few predicative expressions are null-argument (17.2.1), however in most cases they take at least one argument. From the semantic point of view, this argument will be conventionally referred to as the experiencer. Syntactically, the experiencer participant may correspond to the Nominative subject (17.2.2), or, more seldom, to the Dative noun phrase characterized by certain subject properties (17.2.3). On the notion of subject see 15.1.1.

17.2.1. Subjectless constructions

Subjectless copular constructions are based on null-argument predicative words. They do not occur in the Imperative or other oblique moods. Typically the Habitual copula is used, the personal copula is less frequent. The latter takes the 3rd person Singular personal form

17.2.1.1. Environmental construction

This construction describes the calendar and meteorological phenomena, environmental conditions, or the setting of circumstances.

17.2.1.1.1. Predicative elements

The predicative element in this case belongs to one of the three following types. It can be an adjective (1222a), a noun (1222b), or a reduplicated ideophonic stem (1222c).

(1222) a. *xekui*   'hot'   *uligdig'a*   'beautiful'
           aja   'nice'   *iŋeni*   'cold'

	ge:	'bad'	ñaŋmu	'clear'
	tokö	'cloudy'	xakti	'dark'
	ŋegze	'light'		
b.	dogbo	'night'	bolo	'autumn'
	neki	'spring'	tamña	'fog'
	edi	'wind'		
c.	simu-simu	'quite'	pou-pou	'dark, foggy'
	lou-lou	'strong fog'	liŋa-liŋa	'sticky'
	kulu-kulu	'ready'	täk-täk	'fast, hard'
	teu-teu	'quite'	kef-kef	'trees fallen from the wind'

17.2.1.1.2. The copula

In the subjectless copular constructions for the environmental states the Habitual copula *bie* is commonly used (17.1.2). The personal (non-Habitual) copula occurs in subjectless constructions (in the 3rd person singular), but this is not a very frequent option. An example is (1224) where it has the Past form. The copula might be absent altogether, and this might in fact be a result of the omission of the personal copula in the Present tense (1225). There does not seem to be an apparent semantic difference between the Habitual and non-Habitual copular constructions in this case. Examples (1226) illustrate the copula *ede-* 'become', while example (1227) presents the copula *osi-* in the same meaning.

(1223) a.   *Zugdi*   *do:-ni*   *pou-pou*   *bie.*
       house   inside-3SG   dark-dark   be.PRES.HAB
       'It is dark in the house.'
     b.   *Libakta-la*   *liŋa-liŋa*   *bi-s'e.*
       mud-LOC   sticky-sticky   be-PERF
       'It was sticky in the mud.'

(1224) *Ñaŋmu*   *bi-si-ni.*
      clear   be-PAST-3SG
      '(The sky) was clear.'

(1225) a.   *Sikie.*
       evening
       'It is evening.'
     b.   *Zua*   *we:-du*   *aja.*
       summer   mountain-DAT   nice
       'It is nice in summer in the mountains.'

(1226) a.   *Iŋeni*   *ede-ini.*
         cold   become-3SG
         'It is becoming cold.'
    b.   *Uligdig'a*   *ede:-ni*   *bi-s'e.*
         beautiful   become.PP-3SG   be-PERF
         'It has become beautiful (the nature, the weather).'
    c.   *Xekui*   *ede:-ni.*
         warm   become.PAST-3SG
         'It has become warm.'
    d.   *Deŋe-we*   *ila-gi-e*   *ŋegze*
         lamp-ACC   light-REP-IMP.2SG   light
         ede-lege-ni.
         become-PC-3SG
         'Switch on the lamp in order for there to be light.'

(1227) *Teu-teu*   *osi:-ni.*
       quiet-quiet   become-3SG
       'It is becoming quiet.' (K 154)

17.2.1.1.3. Collocation with adverbials

The sentences in question often include spatial adverbials that denote the place characterized by the corresponding setting (1228). In the absence of such an adverbial the sentence is likely to refer to a general meteorological or natural condition. In this case, as in non-copular subjectless sentences (14.1.1), the spatial adverb *ba:-la* 'outside' (literally: 'in the place, in nature') is frequently found (1229).

(1228) a.   *Tiŋeni*   *xekui*   *bi-s'e.*
         yesterday   warm   be-PERF
         'It was warm yesterday.'
    b.   *Pečka*   *kä:-la-ni*   *pam*   *ede:-ni.*
         oven   side-LOC-3SG   black   become.PAST-3SG
         'It became black by the oven (from ash).'

(1229) *Ba:-la*   *xakti*   *ede:-ni.*
       place-LOC   dark   become.PAST-3SG
       'It has become dark outside.'

17.2.1.2. Subjectless destinative construction

Subjectless destinative constructions express the meaning 'it is meant to'. No element in the sentence exhibits the properties typical of the subject (15.1.1). In this way subjectless destinative constructions differ from another destinative participial construction in which a Nominative noun phrase bears the grammatical relation of the subject. For further information on the latter, see 17.2.2.4.

The predicative element in such constructions is a Destinative Participle (7.6.1.3). The construction occurs only in the Present tense. The copula 'be' is not overtly present, which may suggest that we are here dealing with an underlying personal copula.

17.2.1.2.1. Collocation with other elements

The sentences in question obligatorily include an oblique element that restricts the scope of the predication. It is expressed by a noun phrase the case marking of which depends on the case marking in the corresponding non-copular sentence. The participial destinative constructions inherit case marking from the corresponding non-copular construction, cf. examples (a) and (b) below.

(1230) a.　*Ei　toŋi-le*　　　*egbesi:-ti.*
　　　　　this lake-LOC　　swim-3PL
　　　　　'They swim in this lake.'
　　　b.　*Ei　toŋi-le*　　　*egbesi-kči.*
　　　　　this lake-LOC　　swim-DP
　　　　　'It is meant to swim in this lake.'

(1231) a.　*Ei　maŋguana-zi　tuduze-we*　　*olokto-iti.*
　　　　　this pan-INST　　potato-ACC　　cook-3PL
　　　　　'They cook potatoes with this pan.'
　　　b.　*Ei　maŋguana-zi　tuduze-we*　　*olokto-si-kči.*
　　　　　this pan-INST　　potato-ACC　　cook-IM-DP
　　　　　'It is meant to cook potatoes with this pan.'

The Locative and the Instrumental noun phrases within the destinative construction are illustrated again in (1232a) and (1232b), respectively.

(1232) a.　*Ei　teŋku-le*　　　*te:-kči.*
　　　　　this chair-LOC　　sit-DP
　　　　　'It is meant to sit in this chair.'

b. *Moxo-zi*   *'ai-wa*   *umi-kči.*
   mug-INST   vodka-ACC   drink-DP
   'It is meant to drink vodka from this mug.'

17.2.1.2.2. Grammatical relations

The question which arises at this point is which grammatical relation is borne by an element like *toŋi-le* 'in the lake' in (1230b). In (1230a) the noun phrase *ei toŋi-le* is apparently not an argument and can easily be dropped from the sentence without affecting its well-formedness. In the copular destinative construction, however, the same noun phrase is required for the well-formedness of the sentence, as distinct from (1230a). A sentence which consists only of the Destinative Participle, such as, for example (1233), would be ungrammatical.

(1233) **egbesi-kči.*
      swim-DP

According to this criterion, the noun phrase *toŋi-le* should be identified as an argument rather than as an adjunct. It is also possible that it is a part of the predicative expression. However, its exact status as an argument is controversial, and we will leave this question open.

17.2.1.3. Existential construction

The construction predicates the existence of a certain entity in general, in a particular location, or in somebody's temporary possession. This entity corresponds to the predicative element. It immediately precedes the copula, however, it may also be postposed, as in (1234). The postposition of the predicative element seems to be a recent development and can perhaps be explained by the influence of Russian word order.

(1234) *Bu*   *zugdi-du:*   *bie*   *keige.*
      we   house-DAT.1PL.EX   be.PRES.HAB   cat
      'There is a cat in our house.'

The noun-predicative element does not have subject properties as identified in 15.1.1.
   The existential meaning is licensed by the Habitual copula *bie*. Non-existence is asserted by the negative copula *anči*, see 23.2.1.5.1.

17.2.1.3.1. Existential meaning

In (1235) we present examples of sentences that express generic existence, and in (1236) and existence in a specific location that includes the spatial adverbials.

(1235) a.   *Xakta-da*   *bie*   *mala-da*
          grass-FOC   be.PRES.HAB   dry.fish-FOC
          bie   *s'ou-de*   *bie.*
          be.PRES.HAB   scoop-FOC   be.PRES.HAB
          'There is grass, dry fish, and a scoop.'

      b.   *Timana*   *xeleba* *bi-zeŋe-ni.*
          tomorrow   bread   be-FUT-3SG
          'There will be bread tomorrow.'

      c.   *In'ei*   *solügi* *bie.*
          dog   orange   be.PRES.HAB
          'There are orange dogs.'

(1236) a.   *O-du*   *bi*   *zugdi:*   *bi-s'e.*
          this-DAT   me   house.PRES   be-PERF
          'Here was my house.'

      b.   *Kuŋka*   *mo:-lo-ni*   *seutige bie.*
          cedar   tree-LOC-3SG   nut   be.PRES.HAB
          'There are nuts on the cedar tree.'

      c.   *Uli-du*   *zuge*   *xai*   *bie.*
          river-DAT   ice   still   be.PRES.HAB
          'There is still some ice on the river.'

      d.   *Uli-du*   *egdi*   *sugzä:* *bie.*
          river-DAT   many   fish   be.PRES.HAB
          'There are a lot of fish in the river.'

17.2.1.3.2. Possessive meaning

When the Locative or a Dative noun phrase (interchangeably) denotes a person, the construction may have an additional meaning of temporary possession (permanent possession is expressed by the possessive construction, see 17.2.1.4 and especially 17.2.1.4.2).

(1237) a.   *Koko-lo*   *oloxi*   *igi-ni* *bie.*
          Koko-LOC   squirrel   tail-3SG be.PRES.HAB
          'Koko has a squirrel's tail.'

b. *Pakula-la*   *tuxi*   *bie*   *bi-s'e.*
   Pakula-LOC   sledge   be.PRES.HAB   be-PERF
   'Pakula had (with him) a sledge.'

c. *Bi*   *mamasa-du-i*   *sagdi*   *joxo*
   me   wife-DAT-1SG   large   pot
   bie.
   be.PRES.HAB
   'My wife has a large pot (at her place).'

d. *Petia-le*   *kusige*   *bie.*
   Pete-LOC   knife   be.PRES.HAB
   'Pete has a knife.'

e. *Min-du*   *nakta*   *dili-ŋi:*   *bie.*
   me-DAT   boar   head-AL.1SG   be.PRES.HAB
   'I have the head of a boar.'

A small number of examples, however, can be interpreted as expressing permanent possession, as can the one that follows.

(1238) *Sin-dule*   *seuse*   *bie?*   *Seuse*   *min-dule*
     be-LOC   axe   be.PRES.HAB   axe   me-LOC
     bie   *zugdi-le*   *amä:sa:-ni.*
     be.PRES.HAB   house-LOC   leave.PAST-1SG
     'Do you have an axe? I do have an axe, (but) I left it at home.'

17.2.1.3.3. Existential vs. locational construction

Existential sentences, as described in this section, do not have a subject and are not partitioned from the point of view of information structure: they do not have a topic. The predicative element must be located in strict adjacency to the copula verb. They both belong to the assertive part of the proposition and seem to form a single syntactic constituent (this is shown by bracketing in (1239a)). Such sentences are semantically and pragmatically opposed to the locational adverbial constructions with a personal copula (type 17.2.2.2) in which the subject (=topic) does not have to be adjacent to the predicate and tends to be located clause-initially (1239b).

(1239) a. *Ba:-la*   *in'ei*   *bie.*
      nature-LOC   [dog   be.PRES.HAB]
      'There is a dog outside.'

    b. *In'ei*   *ba:-la*   *bi:-ni.*
      dog   place-LOC   be-3SG
      'The dog is outside.'

17.2.1.4. Possessive construction

The possessive relationship is expressed by the copular 'be' construction which corresponds to the two-argument "have" constructions in most European languages. Normally, such a construction expresses permanent possession, both inalienable and alienable, while temporary possession is commonly rendered by existential sentences (17.2.1.3) or the Proprietive forms in -*xi* (17.2.2.1.1).

17.2.1.4.1. The structure of the construction

Since the construction in question typically predicates a permanent property, it involves the Habitual copula *bie*. The negation of the possession happens by means of the negative copula *anči*, it is addressed in more detail in 23.2.3.5.1. The predicative role belongs to the regular possessive noun phrase in which the possessed noun takes the possessive suffix referring to the possessor (13.1). The obligatory presence of the possessive marker makes the possessive construction formally different from the existential construction with possessive meaning (17.2.1.3.2.). Apart from the regular possessive suffix, the possessed noun in the possessive noun phrase can be marked by the alienable possession affix -*ŋi*-. The presence of this suffix on the possessed noun follows the general rules described in 4.2.4.

(1240) *Bi   aziga-ŋi: bie.*
   me   girl-AL.1SG   be.PRES.HAB
   'I have a daughter.'

(1241) a. *Käŋa   ja:-ni   bie.*
    deer   horn-3SG   be.PRES.HAB
    'The deer has horns.'
   b. *Si   kusige-i   bie.*
    you   knife-2SG   be.PRES.HAB
    'You have a knife.'
   c. *Bi   ag'a-i   bie.*
    me   brother-1SG   be.PRES.HAB
    'I have a brother.'
   d. *Nua-ni   sagdi   'ana-ni   bie.*
    he-3SG   large   boat-3SG   be.PRES.HAB
    'He has a large boat.'
   e. *Bi   zube   bugdi: zube   ŋala-i*
    me   two   leg.1SG   two   arm-1SG
    bie.
    be.PRES.HAB
    'I have two legs and two arms.'

The personal copula *bi-* occurs very seldom in this construction but is not completely excluded, perhaps as a result of an analogy with other types, cf.:

(1242) *Uti   Kanda   mafa   ila   aziga-ŋi-ni   bi:-ni.*
      that   Kanda   old.man   three   girl-AL-3SG   be-SG
      'That old man Kanda has three daughters.'

17.2.1.4.2. Possessive vs. existential construction

Although existential (17.2.1.3) and possessive constructions both express some kind of possession, their meaning differs. Inalienable possession (1243a), as well as more or less permanent ownership (1243b), can be rendered only through the possessive construction. Words that regularly require a suffix of alienable possession (4.2.4.2) are also introduced through the possessive construction (1243c).

(1243) a. *Bi (*min-du)*   *ic'a   neŋu-i*
          me (me-DAT)   small   younger.sibling-1SG
          bie.
          be.PRES.HAB
          'I have a small younger brother/sister.'
     b. *Bi   au-i*   *bie,*
          me   cap-1SG   be.PRES.HAB
          au-la-gi-zeŋe-i   *oŋmo:-mi.*
          cap-V-REP-FP-REF   forget.PAST-1SG
          'I have a cap, (but) I forgot to put it on.'
     c. *Uti getu   ja:-ŋi-ti*   *bie.*
          that PL   cow-AL-3PL   be.PRES.HAB
          'They have a cow.'

On the other hand, the existential construction rather predicates existence in the particular location. This is clearly underlined by examples like (1244a), where the existence of an object (a gun) in the temporary possession of a person other than its regular owner is asserted.

(1244) a. *Min-dule   xoŋto   ni: mäunda-ni   bie.*
          me-LOC   other   man   gun-3SG   be.PRES.HAB
          'I have (somebody else's) gun.'
     b. *Sin-du   bie   si   'aga-i*
          you-DAT   be.PRES.HAB you   brother-2SG
          zä:-ni?
          money-2SG
          'Do you have (with you) your brother's money?'

   c.   *Min-du*   *käŋa*   *jä:-ni*   *bie.*
        me-DAT   deer   antlers-3SG   be.PRES.HAB
        'I have deer's antlers.'

17.2.2. Nominative subject pattern

A majority of copular constructions take the subject that corresponds to the Nominative noun phrase. They are classified below according to the types of the predicative elements.

17.2.2.1. Attributive construction

The construction in question predicates different kinds of (temporary) properties, such as (parametric) features, states, qualities, and quantities. The predicative element corresponds to an adjectival phrase, a Nominative noun phrase, or a phrase headed by a quantifier in the Nominative form. Personal pronouns in the predicative role are ruled out. The construction involves the personal copula 'be' (or the copula 'become'), omitted under certain conditions (17.1.1.2), and allows the Imperative, cf.:

(1245) *Si*   *ceme-ktu*   *e-zi*   *bi.*
        you   lye-N   NEG-IMP.2SG   be
        'Don't be a liar.'

17.2.2.1.1. Adjectives in predicative function

In (1246) we illustrate the adjectival copular construction with the overt copula 'be'; in (1247) the 3rd person Present tense copula is omitted; in (1248) the copula 'become' is illustrated. In the finite position the adjective is often followed by the focus clitic particle *-dA* (12.1.1.3), cf. (1249).

(1246) a. *Bi zoŋku bi-mi.*
        me poor be-1SG
        'I am poor.'
     b. *Si*   *zugdi:*   *sagdi* *bi-s'e.*
        you   house.2SG   large   be-PERF
        'Your house was large.'
     c. *Nina*   *alagdig'a*   *bi-s'e.*
        Nina   beautiful   be-PERF
        'Nina was beautiful.'

    d. *Bi*   *udie*   *bi-mi.*
       me   Udihe be-1SG
       'I am Udihe.'

(1247) a. *Ussuri*   *ketu*   *suŋta.*
        Ussuri   very   deep
        'The Ussuri is very deep.'
     b. *Xuda-si:*   *ni:*   *ja:-ni*   *kaŋgas'a.*
        fur-V.PRP man   eye-3SG   narrow
        'The merchant's eyes are narrow.'

(1248) *Si* *sagdi*   *ede-zeŋe-i.*
      you big   become-FUT-2SG
      'You will become big.'

(1249) a. *Aziga*   *ñukte-ni*   *wanimi-de.*
        girl   hair-3SG   long-FOC
        'The girl's hair is long.'
     b. *Bu* *zugdi-u*   *sagdi-de.*
        we house-1PL.EX   large-FOC
        'Our house is large.'

The adjectives *aja* 'good' and *ge:* 'bad' used in the copular construction can refer merely to somebody's health, rather than any other quality of the individual. The construction answers the question *ono bie?* 'how is X?', cf.:

(1250) a. *Ono*   *bie*   *Anna?* *Aja*   *bi:-ni.*
        how   be.PRES.HAB Anna   good   be-3SG
        'How is Anna? She feels well.'
     b. *Sita-na-i*   *teu*   *aja*   *bi:-ti.*
        child-PL-1SG   all   good   be-3PL
        'All of my children are healthy.'

17.2.2.1.2. Quantifiers in predicative function

The predicative element can correspond to a numeral (1251) or a scalar quantifier (1252), cf.:

(1251) a. *Zueze*   *zube*   *bi-zeŋe-ni.*
        table   two   be-FUT-3SG
        'There will be two tables.'

b. *Niŋka*   *maŋga-ŋi-ni*   *zu:*   *bi-si-ni.*
    Chinese   leader-AL-3SG   two   be-PAST-3SG
    'The Chinese had two leaders.' (SKX 322)

(1252) a. *Anana*   *dawa*   *egdi*   *bi-s'e.*
           long.ago   salmon   much   be-PERF
           'There were a lot of salmon before.'

    b. *Ima:*   *egdi*   *bi-s'e.*
        snow   much   be-PERF
        'There was a lot of snow.'

    c. *O-du*   *b'oto*   *egdi.*
        this-DAT   mushroom   many
        'There are many mushrooms here.'

    d. *Biki-le*   *sugdä:*   *egdi.*
        Bikin-LOC   fish   much
        'There are a lot of fish in the Bikin.'

17.2.2.1.3. Nouns in predicative function

Examples of the predicative nouns are:

(1253) a. *Bi*   *aja*   *wakca-i*   *ni:*   *bi-mi.*
           me   good   hunt-PRP   man   be-1SG
           'I am a good hunter.'

    b. *Nua-ni*   *elu*   *ni:.*
        he-3SG   honest   man
        'He is an honest person.'

    c. *Koko*   *bi*   *aja*   *anda-i.*
        Koko   me   good   friend-1SG
        'Koko is my good friend.'

In the construction in question the subject and the predicative noun may stand in a semantic relation of inalienable possession. Still this relationship is encoded as a predicative relationship. This construction has several subtypes. It may denote material of which something is made (1254), body parts or some other part-whole relationship (1255).

(1254) a. *Ei* *tege* *niŋka*   *seule-ni.*
           this gown   Chinese   silk-3SG
           'This gown is made of Chinese silk.'

b. *Wa-la*   *ni:-ni*   *xulah-ni*   *mafa*   *n'ata-ni*
    kill-N   man-3SG   blanket-3SG   bear   skin-3SG
    bi-si-ni.
    be-PAST-3SG
    'The blanket of a successful hunter used to be made of bear skin.'
    (SK 1008)

(1255) a. *ŋala-ni*   *tu:*   *sakä*   *bi-si-ni.*
           hand-3SG   all   blood   be-PAST-3SG
           'His hands were all (covered with) blood.' (SK 659)
     b. *Nua-ni*   *omo*   *ŋala*   *bi-si-ni.*
           he-3SG   one   arm   be-PAST-3SG
           'He was one-armed.' (SK 659)

Further, the construction may express measurements. The nouns of measure
that are used predicatively are: *ceŋele* 'weight', *eŋmele* 'width', *wanile*
'length', and *gugdala* 'height'. They exhibit one peculiarity: they take the
possessive affix that refers to the subject (this does not depend on the presence
vs. absence of the overt copula). The actual measure is expressed by the
Accusative noun phrase, which precedes the predicate. The sentence is in the
3rd person and does not normally include the overt copula, cf.:

(1256) a. *Bi* *pute-i*   *ila*   *kile-we*   *ceŋele-ni.*
           me   bag-1SG   three   kilogram-ACC   weight-3SG
           'My bag weighs three kilograms.'
     b. *Ei* *xokto* *zube*   *kilometra-we*   *wanile-ni.*
           this road   two   kilometer-ACC   length-3SG
           'This road is two kilometers long.'
     c. *Seuni:*   *egdi*   *tamah-ni*   *ahnta*   *tege-ni.*
           scary   much   price-3SG   woman   gown-3SG
           'Women's gowns are terribly expensive.' (SK 1097)

Finally, in the construction expressing age, the copula must be overtly present
even in the Present tense 3rd person Singular. The predicative element is the
Nominative noun phrase headed by the word *se:* 'year' modified by a numeral,
cf.:

(1257) a. *Si* *adi*   *se:*   *bi:?* *Bi*   *nada*
           you how.many   year   be.2SG me   seven
           se: *bi-mi.*
           year   be-1SG
           'How old are you? I am seven years old.'

b.   *Nua-ti   ilaza   se: bi:-ti.*
he-3PL   thirty   year   be-3PL
'They are thirty years old.'

c.   *Bi sita-na-i   tuŋa   se: ede-kte:-ti.*
me   child-PL-1SG   five   year   become-DIST.PAST-3PL
'My children have each become five years old.'

Another frequent type of predicative nouns is those in *-mule*, normally denoting living persons that bear a symmetrical relationship to each other (5.1.3.13). In such constructions the copula is never omitted, and shows Plural agreement. The subject may have the Plural form (1258), be expressed by a coordinated structure (1259) or have the Dual form of the pronoun 'me' *min-zuŋe* 'I with you' (9.1.1), as in (1260). On the subject modified by the Instrumental noun phrase see 13.5.1.

(1258) a.   *Nua-ti   anda-mule   ede:-ti*
he-3SG   friend-N   become.PAST-3PL
ic'a-digi-de.
small-ABL-FOC
'They have been friends since childhood.'

b.   *Bu xa:-mule   bi-u.*
we   sibling-N   be-1PL.EX
'We are brothers.'

c.   *Nua-ti   seŋgite-mule   ede:-ti.*
he-3PL r   elative-N   become.PAST-3PL
'They became relatives.'

d.   *Bue-ti   men-e   do-lo   xa:-mule*
he-3PL   REF-0   inside-LOC   sibling-N
bi:-ti.
be-3PL
'They are siblings to each other.'

e.   *Anda-mule   o:-zo-fi.*
friend-N   become-SUBJ-1PL.IN
'Let us be friends.'

(1259) *Waŋba   oloxi   anda-mule   bi-si-ti .*
tortoise squirrel   friend-N   be-PAST-3PL
'Tortoise and Squirrel were friends.' (K137)

(1260) *Min-zuŋe   zalä-mule   bi-fi.*
me-both   cousin-N   be-1PL.IN
'We (you and I) are cousins.'

17.2.2.1.4. Proprietives in predicative function

With the Proprietive forms in *-xi* (4.3.1) the construction has a possessive interpretation. Its meaning is then comparable to the meaning of the regular possessive construction (17.2.1.4). However, there is a certain difference: possessive sentences (17.2.1.4) assert the existence of an object in somebody's possession, while the possessive constructions with the Proprietive forms assert possession as a characteristic of the subject participant. In fact, the meaning of the form in *-xi* can be either possessive (1261) or non-possessive (1262). In the latter case it simply describes a certain quality of the subject.

(1261) a. *Bi   ma:ma-i   weige-xi.*
           me   grandmother-1SG   earring-PROP
           'My grandmother has earrings.'

   b. *Ei   uligdig'a   aziga   ja:pti-xi.*
       this beautiful   girl   braid-PROP
       'This beautiful girl has braids.'

   c. *Si   oto-ŋi-xi   bi:?*
       you   plate-AL-PROP   be.2SG
       'Do you have a plate?'

(1262) a. *'Ana   saŋa-xi   ede:-ni.*
           boat   hole-ADJ   become.PAST-3SG
           'The boat became full of holes.'

   b. *Nua-ni   unugu-xi.*
       he-3SG   illness-ADJ
       'He is ill.'

Proprietive forms are negated in an irregular fashion by means of the Partitive negative construction as in (1263). For further information see 23.2.1.5.4.

(1263) *Nua-ni   unugu-le   anči.*
        he-3SG   illness-PART   no
        'He is not ill.'

It should be noticed that Proprietive constructions and their negative counterparts may sometimes be subjectless and have an impersonal interpretation, cf.:

(1264) a. *J'e-le-dem   ni:-xi.*
           what-LOC-IND   man-ADJ
           'There are people everywhere.'(K166)

b. *Buga-la*　　　　　*anči*　*bi-si-ni.*
island-PART　　　　no　　be-PAST-3SG
'There were no islands.' (SKX 320)

c. *Bagä:-za-la*　　　*xaisi*　*mo:-xi*　　*bihi-ni.*
other-N-LOC　　　also　　tree-PROP　be-3SG
'There are trees on the other side (of the river) as well.'
(Schneider 1937: 72)

17.2.2.1.5. Plural agreement

Although expression of plurality is optional, the Plural of the subject can be encoded on the predicative adjective by means of the adjectival Plural marker *-ŋku* (on this marker see 6.1.2.1.1). The subject itself may remain in the Singular; the copula is either omitted from the clause (1265), or takes Plural agreement (1266). When the subject corresponds to a personal pronoun of any person the Plural marker *-ŋku* on the predicative adjective is normally absent, cf. (1267).

(1265) a. *Ei*　*moxo*　*imexi-ŋku.*
this　cup　　new-PL
'These cups are new.'

b. *Nua-ni*　　　*aziga-ni*　　　*ic'a-ŋku.*
he-3SG　　　daughter-3SG　small-PL
'His daughters are small.'

c. *Soŋgo*　　　*seuni-ŋku.*
bear　　　　frightful-PL
'Bears are frightful.'

(1266) *Ei*　　*ñ'aula*　*maŋga-ŋku*　*bi:-ti.*
this　boy　　strong-PL　be-3PL
'These boys are strong.'

(1267) *Nua-ti*　　　*ic'a-i*　　*bi-si-ti.*
he-3SG　　　small-FOC　be-PAT-3PL
They are small.'

When the subject is morphologically marked for plurality with the Plural affix *-ziga*, number agreement between it and the predicative adjective is strictly obligatory, cf. (1268a) and (1268b):

(1268) a. *Aziga-ziga*　　　　　*alagdig'a-ŋku*　　　　*bi:-ti.*
girl-PL　　　　　　　beautiful-PL　　　　　be-3PL
'The girls are beautiful.'

b. **Aziga-ziga*   *alagdig'a*   *bi:-ti.*
   girl-PL   beautiful   be-3PL
   'The girls are beautiful.'

Quantifiers in the predicative position do not require either a plural subject or plural agreement on the copula, as illustrated above in 17.2.2.1.2. However, the 3rd person Plural is not totally excluded, cf.:

(1269) *Anana*   *bi*   *za-i*   *egdi*   *bi-s'e,*   *eitene*
       long.ago   me   friend-1SG   many be-PERF   now
       wac'a bi:-ti.
       few be-3PL
       'Previously I had many friends, these days I have few of them.'

The predicative noun never takes plural agreement, so the subject agrees in number only with the copula and not with the predicative element, cf. (1270a) and (1270b). More examples are presented in (1271).

(1270) a. *Nua-ni*   *aja*   *ni:*   *bi:-ni.*
        he-3SG   nice   man   be.RES-3SG
        'He is a nice person.'
     b. *Nua-ti*   *aja*   *ni:*   *bi:-ti.*
        he-3PL   nice   man   be-3PL
        'They are nice people.'

(1271) a. *Ba: ni:-ni*   *bi-fi*   *minti.*
        sky man-3SG   be-1PL.IN   we
        'We are sky people.'
     b. *Su mamaka*   *mamasa*   *esi-gi-u.*
        you old.man   old.woman   become-REP-2PL
        'You are becoming old (literally: old man and old woman).'

If the predicative element denotes a body part, typically combined with a numeral *omo* 'one', the construction rather has a possessive meaning.

(1272) a. *Nua-ni*   *omo*   *ŋala*   *bi-si-ni.*
        he-3SG   one   hand   be-PAST-3SG
        'He had one hand.' (SKX 316)
     b. *Nua-ni*   *omo*   *gagda bugdi.*
        he-3SG   one   another leg
        'He is one-legged.'

17.2.2.2. Adverbial construction

The adverbial copular construction predicates various adverbial relations, such as the spatial, comparative, purposive, and others. The predicative element corresponds to the noun phrase in the oblique cases, the postpositional phrase, or the adverbial phrase. The personal copula used in this construction is normally present even in the 3rd person Singular in the Present tense. The Imperative and other oblique moods are ruled out.

17.2.2.2.1. Destinative nouns in predicative function

The Destinative noun within the copular construction predicates the destination of the subject for a particular potential recipient (benefactive) or for making something (goal). So there is an apparent semantic difference between such constructions and constructions with Destinative Participles (17.2.1.2 and 17.2.2.4), which indicate that an object is designed for a certain activity. Destinative copular constructions are found only in the 3rd person. The predicative element is a destinative possessive noun phrase that encodes the benefactive/goal. The noun in the Destinative case takes the possessive reflexive suffix -*mi* in the meaning of general destination when the potential goal is not expressed within the destinative noun phrase (1273a). When the benefactive is expressed as a possessive modifier, it is referred to by possessive affixes on the head, see (1273b) and (1273c).

(1273) a. *Ei   ñaktu   mo: saŋmiŋku-ne-mi.*
            this rotten   tree   smoke-DEST-REF
            'This rotten tree is for the smoke (against mosquitoes).'
       b. *Minti   omölo-no-fi*   *bi-zeŋe-ni*
            we.IN   daughter.in.law-DEST-1PL.IN   be-FUT-3SG
            belie.
            girl
            'The girl will be our daughter-in-law.'
       c. *Si-de   elu   ni:-ne-i   osi:.*
            you-FOC   now   man-V-2SG   become.2SG
            'You have now become grown up.' (K 164)

We have at least one example at our disposal in which grammatical relations are reverse: the destinative noun seems to correspond to the subject of a copular construction, while a Nominative noun has a predicative function. This follows from the word order and semantics of the sentence. Unfortunately, no other material is available.

(1274) *Juge   xei-ne-ni*   *jaŋza-ktu   xei.*
      scoop handle-DEST-3SG   decorate-RES   handle
      'The scoop handle is decorated (with ornaments).' (SK 393)

17.2.2.2.2. Nouns in the oblique cases in predicative function

A noun in the local cases does not itself have a predicative function. What is predicated by such a construction is the local relation of the noun phrase to the subject. The noun within the predicative phrase takes the Dative/Locative or the Ablative. In the Dative/Locative it denotes temporary location (1275) and, if it is animate, it can also express a woman's marital relationship (1276).

(1275) a.   *Anna   zugdi-du   bi:-ni.*
            Anna   home-DAT   be-3SG
            'Anna is at home.'
       b.   *Bi   abuga-i   Bali-du   bi:-ni.*
            me father-1SG   Khabarovsk-DAT   be-3SG
            'My father is in Khabarovsk.'
       c.   *Ei   liste   kiniga-du   bi-si-ni.*
            this sheet   book-LAT   be-PAST-3SG
            'This sheet was in the book.'
       d.   *Kuliga   tekpu-ni   kä:-di-ni   bi:-ni.*
            snake   skin-3SG   side-DAT-3SG   be-3SG
            'The snake skin is nearby.'

(1276) *Stepana-du   bi-mi.*
      Stepan-DAT   be-1SG
      'I am married to Stepan.'

In the Ablative the predicative noun phrase denotes the place of origin of the subject participant, cf.:

(1277) a.   *Ei   ñ'aula Oloŋo-digi   (bi:-ni).*
            this child   Olon-ABL   (be-3SG)
            'This boy is from Olon.'
       b.   *J'e-digi   in'ei-ziga?*
            what-ABL   dog-PL
            'Where are these dogs from?'

The Instrumental noun phrase in the predicative function either denotes material (1278a) or has a comitative meaning (1278b).

(1278) a.   *Umu-ni*   *ña:-zi.*
            belt-3SG   leather-INST
            'His belt is made of leather.' (SKX 292)

     b.   *Gagda*   *e:-tigi*   *uti*   *getu-de*
            second   side-LAT   that   PL-FOC
            men-e-men-e   *meime-zi*   *bi:-ti.*
            REF-0-REF-0   harpoon-INST   be.PRES-3PL
            'Each person on either side had his own harpoon.' (SKX 302)

17.2.2.2.3. Adverbs in predicative function

The adverbial expressions that participate in copular constructions indicate a certain property of the subject, cf.:

(1279) a.   *Sul'ai*   *xokto-ni*   *uta-uxi*   *bi:-ni.*
            fox   footstep-3SG   that-LAT   be-3SG
            'The fox's footsteps go that way.' (K 159)

     b.   *Bu ege-u*   *uta-la*   *bi-si-ni.*
            we   soul-1PL.EX   that-LOC   be-PAST-3SG
            'Our souls were there.' (K 186)

     c.   *Waŋba*   *xegdini bi-si-ni.*
            tortoise   down   be-PAST-3SG
            'The tortoise was on the bottom.' (K 137)

17.2.2.2.4. Postpositional phrases in predicative function

The predicative element can correspond to the locational (1280), comparative (1281), or comitative (1282) postpositional phrase. For the list of corresponding postpositions see 10.2.

(1280) *Xeleba*   *zueze*   *we:-le-ni*   *bi:-ni.*
       bread   table   top-LOC-3SG   be-3SG
       'The bread is on the table.'

(1281) a.   *Ei   zugdi   minti*   *zugdi-fi*   *bede.*
            this house   we   house-1PL.IN   ike
            'This house is like ours.'

     b.   *Guzakta-ni*   *ŋaŋta labuga-ni*   *bede.*
            beard-3SG   branch moss-3SG   like
            'His beard is like the moss on the branches of the pine tree.'

c. *Xuda-si:*   *ni:*   *bogo*   *boloi-fi*   *jandasa*
fur-V.PRP   man   fat   autumn-ADJ   badger
bede.   *Bou*   *kuŋka*   *texe*   *bede*   *bi:-ni*
like   fat   cedar   trump   like   be-3SG
xuda-si: *ni:.*
fur-V.PRP   man
'The merchant is fat like an autumn badger. The merchant is fat like a cedar trump.'

d. *We:*   *kico-ni*   *ogbö*   *dili-ni*
mountain   top-3SG   elk   head-3SG
xeŋki-ni   *esi-e-ni.*
like-3SG   become-PAST-3SG
'The top of the mountain became similar to the elk's head.'

e. *Si* *bi*   *di:ŋki*   *bi-s'e-i.*
you me   like.1SG   be-PERF-2SG
'You were of my size.'

(1282) a. *Bi* *xa:*   *mule*   *bi-mi.*
me brother with   be-1SG
'I have a brother.' (literally: I am with my brother)

b. *Bi* *sita*   *mule*   *bi-mi.*
me son   with   be-1SG
'I live with my children.'

c. *Omo*   *jegdige*   *bagdi-e-ni*   *eniŋe*
one   hero   live-PAST-3SG   mother
mule   *zuŋe-de.*
with   both-FOC
'A hero lived together with his mother.' (K 179)

The postpositional phrase with the postposition *bede* 'like' sometimes does not involve a noun standard of comparison, but an adjective or a demonstrative pronoun. The construction expresses the comparison with a class of objects characterized by the corresponding adjective, without actually naming any of these objects. It is based on a general knowledge of the typical properties of such objects that is shared by all members of the linguistic community. The postposition *bede* is translated in this case as 'looks like'. Only a few adjectives and pronouns can participate in such constructions, and these are the following:

(1283) *imexi*   'new'   *inigi*   'alive'
      ñ'aula   'young'   *ei*   'this

Since we deal here with inherent and more or less permanent characteristics of the subject, only the Habitual copula *bie* is present in such constructions.

(1284) a. *Zugdi*   *imexi*   *bede*   *bie.*
        house   new   like   be.PRES.HAB
        'The house looks like a new one.'

     b. *Si   ñ'aula   bede   bie.*
        you child   like   be.PRES.HAB
        'You look young.'

     c. *Ute*   *bede*   *ei*   *bie.*
        that   like   NEG.PRES   be.PRES.HAB
        'It does not happen to be this way.'

17.2.2.3. Alienable possessive construction

One of several options used to express a possessive relationship is the copular construction in which the predicative word corresponds to the nominal (a noun or a personal pronoun) with the alienable possession suffix *-ŋi-* (see 4.1.4.4 and 9.1.1.3). The predicative word with the suffix *-ŋi-* denotes the possessor, and this is the only case in Udihe in which the possessor is morphologically marked. However, in this case we are dealing not with the possessive noun phrase but with the predicative relationship. The suffix *-ŋi-* here signifies that the possessive relationship is the main predication in the sentence. For obvious semantic reasons, only the alienable possessive relationship can be predicated by the construction in question. It does not allow a subject in the 1st or 2nd person, or the Imperative and other non-Indicative moods. Tense forms other than the Present are also hardly found, and accordingly the personal 3rd person Present tense copula *bi:-ni* is normally omitted.

    The possessed noun does not form a constituent with the possessor-noun. It need not be overtly present within the clause, as in (1285), or it may function as the subject, as in (1286).

(1285) a. *Ni*   *kusige-ni?*   *B'ata-ŋi.*
        who   knife-3SG   boy-AL
        'Whose is the knife? The boy's.'

     b. *Ni*   *kiniga-ni?*   *Kolia-ŋi.*
        man   book-3SG   Kolya-AL
        'Whose is this book? Kolya's.'

     c. *Zu: se:*   *ule:*   *käŋa-ŋi*   *soŋo-ŋi.*
        two sort   meat   deer-Al   bear-AL
        'There are two sorts of meat (here), deer meat and bear meat.'

(1286) a.   *Ei   suese   Susana-ŋi.*
           this axe   Susan-AL
           'This axe is Susan's.'

       b.   *Ei   zugdi   bi   ami-ŋi:.*
           this house   me   father-AL.1SG
           'This house is my father's.'

As well as by nouns, the predicative role can also be played by the possessive forms of Personal pronouns, which are also marked by the suffix *-ŋi-* (see 9.1.1.3).

(1287) *Ei·   ugda   nua-ti-ŋi.*
        this boat   he-3PL-AL
        'This boat is theirs.'

17.2.2.4. Destinative construction

Destinative Participles function in null-argument copular constructions of general destination (17.2.1.2). They also participate in a copular construction in which the destination seems to be asserted with respect to a particular entity encoded as the grammatical subject. The subject noun phrase takes the Nominative form, and exhibits the subject properties described in 15.1.1. Unfortunately, our material is not sufficient to allow us to make a definite judgement on whether all Destinative Participles derived from all verbs allow both types of destinative constructions (the subjectless construction and the personal construction). At present, it appears as though one-argument intransitive verbs only follow the subjectless pattern and that adjuncts cannot be promoted to the subject of destinative clauses. The contrast between the subjectless destinative construction 17.2.1.2 and the destinative construction with a subject can be seen in the following examples. The impersonal sentence (1288a) corresponds to two destinative copular sentences (1288b) and (1288c).

(1288) a.   *Ei   xeku-zi   in'ei-we   egbesi:-ti.*
           this rope-INST   dog-ACC   tie-3PL
           'They tie the dog with this rope.'

       b.   *Ei   xeku-zi   in'ei-we   egbesi:-kči.*
           this rope-INST   dog-ACC   tie-3PL
           'It is intended to tie the dog with this rope.'

       c.   *Ei   xeku   in'ei-we   egbesi:-kči.*
           this rope   dog-ACC   tie-3PL
           'This rope is for tying the dog.'

In (1288b) the Instrumental noun phrase inherits its case from (1288a) and is not a subject (see 17.2.1.2), while in (1288c) it is a Nominative subject noun phrase. The translations of (1288b) as an impersonal and of (1288c) as a personal sentence reflects this distinction.

The construction in question does not have a definite time reference, but rather expresses a timeless universal situation. Therefore the Destinative Participle is compatible only with the Present tense (personal) copula, which, in its turn is usually omitted, cf.:

(1289) a. *Ei   mä:usa*   *bui-we*   *wakca-kči.*
           this gun   animal-ACC   hunt-DP
           'This gun is for hunting the animal.'
      b. *Ei   mulexi*   *uli-we*   *gada-kči.*
           this bucket   water-ACC   carry-DP
           'This bucket is for carrying water.'

(1290) a. *Kuti*   *wa-kči*   *bi:-ni.*
           tiger   kill-DP   be-3SG
           'The tiger lives for killing.'
      b. *Zugdi*   *badgi-kči*   *bi:-ni.*
           house   live-DP   be-3SG
           'The house is for living.'
      c. *Zeu*   *diga-kči*   *bi:-ni.*
           food   eat-DP   be-3SG
           'Food is for eating.'

17.2.2.5. Resultative construction

Resultative Participles (7.6.1.4) in the predicative function express an aspectual meaning: they denote the resultative state, that is, the observable state that results from the previous situation denoted by the verbal stem. Both subjective (17.2.2.5.1) and objective (17.2.2.5.2) Resultative Participles participate in such constructions. The resultative construction involves the personal copula 'be', optionally omitted in the 3rd person Singular Present tense.

(1291) *Nua-ni*   *sokto-ktu*   *(bi:-ni)*.
        he-3SG   drink-RES   (be-3SG)
        'He is drunk.'

17.2.2.5.1. Subject-oriented resultative

The subject-oriented resultative denotes the state of the single participant of an intransitive situation. The subject (experiencer of the resultative state) is identical to the subject participant of the (hypothetical) previous situation.

(1292) a. *Biki*   *uli-ni*   *xa:-ktu.*
       Bikin   river-3SG   get.shallow-RES
       'The river Bikin became shallow.'

     b. *Bi*   *ŋala-i*   *auli-ktu.*
       me   hand-1SG   swell-RES
       'My hand is swollen.'

     c. *Deŋe*   *su:-ktu.*
       lamp   go.out-RES
       'The lamp died out.'

     d. *Ei mo:*   *zegde-ktu.*
       this tree   burn-RES
       'This tree is burnt.'

     e. *B'ata*   *nienisi-ktu.*
       boy   get.sweaty-RES
       'The boy became sweaty.'

     f. *Ei ñ'aula lali-ktu*   *bi:-ni.*
       this child starve-RES   be-3SG
       'This child is hungry.'

17.2.2.5.2. Object-oriented resultative

In the object-oriented Resultative, the subject-experiencer of the resultative state corresponds to the object (patient/theme) participant of the previous transitive situation, while its agent remains unspecified. Remarkably, in such resultative constructions there are two alternative coding options for the subject-experiencer of the resultative state: the Nominative (1293) or the Accusative (1294).

(1293) a. *Tege*   *guzaga-ktu.*
       gown   tear-RES
       'The gown is torn up.'

     b. *Nua-ni*   *tege-ni*   *teu*   *to-lo-ktu.*
       he-3SG   gown-3SG   all   button-V-RES
       'His gown is all buttoned.'

(1294) a. *Weige-we*   *aunda-ktu.*
           floor-ACC   dry.up-RES
           'The floor is dried up.'
       b. *Si*   *kusige-we-i*   *zü-ktu.*
           you   knife-ACC-2SG   sharpen-RES
           'Your knife is sharpened.'

The case difference seems to be an instance of free morphological variation. There is no apparent semantic difference between the two options; thus (1293a) can be expressed with the Accusative experiencer as well.

(1295) *Tege-we*   *guza-ga-ktu.*
       gown-ACC   tear-DEC-RES
       'The gown is torn up.'

Both the Accusative and Nominative noun phrases seem to exhibit the subject properties described in 15.1.1 and should be identified as the subject. When the Resultative Participle takes the redundant affix of the passive Past Participle -*sA* (7.5.1.3) the construction does not appear to differ from the regular resultative constructions, except that the subject must be in the Accusative (the Nominative is banned), cf.:

(1296) a. *Ei tuduze-we*   *siki-ktu-se.*
           this potato-ACC   wash-RES-PP.PAS
           'This potato has been washed.'
       b. *Tegbeni*   *uli-we*   *mantila-ktu-se.*
           dirty   water-ACC   pour-RES-PP.PAS
           'The dirty water has been poured away.'
       c. *Ei mo:-wo*   *tugbu-ktu-se.*
           this tree-ACC   cut-RES-PP.PAS
           'This tree has been cut down.'

17.2.2.5.3. Plural agreement

Plurality may be emphasized by means of the Restrictive focus particle *m'ei* (12.1.1.9.2). In the Plural the Resultative Participle does not agree in number with the copula.

(1297) a. *Ei ñ'aula-ziga*   *cemne-ktu*   *bi:-ti.*
           this child-PL   deceive-RES   be-3PL
           'These children are deceived.'

b. *Ei   in'ei-ziga   koŋko-ktu   bi-zeŋe-ti.*
    this dog-PL   beat-RES   be-FUT-3PL
    'These dogs will be beaten.'

c. *Nua-ti   deu-ktu bi:-ti.*
    he-3PL   get.tired-RES be-3PL
    'They are tired.'

17.2.2.5.4. Collocation with adverbials

The time reference of the resultative construction is the time of the resultant state and not of the process that leads to this state. This can be seen from the collocation with time adverbials that refer to the time of the state. In (1298a) the adverb *tiŋeni* 'yesterday' and in (1298b) the adverb *timana* 'tomorrow' indicate the time of the state, although the event of closing the shop or house, respectively, can occur at any previous time.

(1298) a. *Tiŋeni   magazina   kimpi-ktu   bi-s'e.*
           yesterday   shop   lose-RES   be-PERF
           'Yesterday the shop was closed.'

    b. *Timana   bi   zugdi: kimpi-ktu*
        tomorrow   me   house.1SG   close-RES
        bi-zeŋe-ni.
        be-FUT-3SG
        'Tomorrow my house will be closed.'

Since the construction denotes the state, and not the process, it cannot include certain adverbs such as, for example, *ei* 'just now', or those adverbials that characterize verbal action, cf. the ungrammatical (1299).

(1299) **Oño-wo   tuge-zi   oño-ktu.*
        letter-ACC   quick-INST   write-RES
        'The letter is written quickly.'

17.2.2.6. Construction with ideophones

Most ideophonic adverbs (10.1.3.2) are regularly used in the predicative function in combination with either the personal copula *bi-* or, more often, the impersonal copula *bie*. The choice of the copula basically depends on whether the construction expresses a permanent or a temporary state (see 17.1). Other copulas may also be used (17.2.2.6.3). Unlike adjectives (17.2.2.1), the ideophones never take Plural markers, so the Plural of the subject can be marked only in the subject noun phrase or the agreement affix on the copula.

As distinct from the bound adjectives addressed in 6.4.4.2.2, ideophones that enter copular compounds have also another syntactic function: they mostly function as verbal modifiers (see 10.1.3.2.3). Their double function is illustrated below. The examples in (a) below show the ideophones in adverbial function, while examples (b) illustrate the corresponding ideophones within a compound adjective.

(1300) a.   *Ja:*   *kilum*   *ise-si:-ni.*
        eye   angry   see-IM-3SG
        'He is looking with angry eyes.'
    b.   *Ja:*   *kilum*   *ede:-ni.*
        eye   angry   become.PAST-3SG
        'His eyes became angry.'

(1301) a.   *Meje-i*   *pam*   *tagda:-ni.*
        mind-REF   black   get.angry.PAST-3SG
        'He got very angry.'
    b.   *Pam*   *ede:-ni.*
        black   become.PAST-3SG
        'He became black from anger.'

(1302) a.   *Tu-tu*   *ŋene:-ni.*
        quiet-quiet   go.PAST-3SG
        'He left quietly.'
    b.   *Tu-tu*   *bi-e!*
        quiet-quiet   be-IMP.2SG
        'Be quiet!'

(1303) a.   *Pam*   *buto:-ti.*
        black   get.dirty.PAST-3PL
        '(They) are soiled with black.'
    b.   *Pam*   *ede:-ni.*
        black   become.PAST-3SG
        'It became black.'

(1304) a.   *Dili*   *zeŋge-zeŋge*   *usa-wasi-si:.*
        head   swinging-swinging   move-DIV-IM.PRP
        'The head is swinging unsteadily.'
    b.   *Zege-zeŋge*   *ede:-ni.*
        swinging-swinging   become.PAST-3SG
        'It started to swing.'

17.2.2.6.1. Construction with the personal copula

The examples below illustrate the personal 3rd person Present copula 'be' in sentences that express a temporary state. The copula must always be overtly present, even in the 3rd person in the Present tense.

(1305) a.   *Nua-ni*   *ja:-ni*   *bugdam*   *bi:-ni.*
          he-3SG   eye-3SG   goggling   be-3SG
          'He was goggling (at something).'
      b.   *Bi* *abuga-i*   *teu-teu*   *bi:-ni.*
          me father-1SG   quite-quite   be-3SG
          'My father is silent.'
      c.   *Nua-ni*   *muľ-muľ*   *bi:-ni.*
          he-3SG   toothless-toothless   be-3SG
          'He is toothless.'
      d.   *Tege*   *čif-čif*   *bi-s'e.*
          gown   wet-wet   be-PERF
          'The gown was wet through.'

17.2.2.6.2. Construction with the Habitual copula

Examples:

(1306) a.   *In'ei*   *pigdäm*   *bie.*
          dog   inside   be.PRES.HAB
          'The dog is inside.'
      b.   *Nakta*   *sezem* *bie.*
          boar   shaggy be.PRES.HAB
          'The boar has shaggy hair.'
      c.   *Čäza*   *täk-täk*   *bie.*
          trap   hard-hard   be.PRES.HAB
          'The trap is hard.'
      d.   *Kusige*   *cem-cem*   *bie.*
          knife   sharp-sharp   be.PRES.HAB
          'The knife is sharp.'
      e.   *Ei* *kektime*   *kei-kei*   *bie.*
          this bank   steep-steep   be.PRES.HAB
          'This bank is steep.'

17.2.2.6.3. Construction with other copulas

The following examples illustrate the use of the copula 'become' in the construction in question.

(1307) a. *Nua-ni*   *mulʲ-mulʲ*   *ede:-ni.*
           he-3SG   toothless-toothless   become.PAST-3SG
           'He became toothless.'

    b. *Uli*   *pice-pice*   *e:-ni.*
           water   spill-spill   become.PAST-3SG
           'Water has spilled out.'

    c. *In'ei*   *kidem-kidem*   *ede:-ni.*
           dog   on.end-on.end   become.PAST-3SG
           'The dog's fur stood on end.'

    d. *Nua-ni*   *bakčam*   *ede:-ni.*
           he-3SG   crooked   become.PAST-3SG
           'He is doubled up (in pain).'

    e. *Jogoso*   *xaŋna-xaŋna*   *esi-gi-e-ni.*
           channel   dry-dry   become-REP-PAST-3SG
           'The channel completely dried up.'

Remarkably, as distinct from copular constructions with nouns and adjectives, ideophones are compatible with the "semantically light" verbs *wo:-* and *nixe-* 'make, do'.

(1308) a. *Uli*   *pice-pice*   *wo:-ni.*
           water   spray-spray   make.PAST-3SG
           'The water spilt with spray'

    b. *ŋua-isi-ni*   *i:-le-dele*   *kär-kär-kär*
           sleep-PC-3SG   what-LOC-IND   shave-shave-shave
           wo-ini.
           make-3SG
           'While he is sleeping, shaving is happening somewhere.' (K 110)

    c. *Modor-modor*   *wo:-ini.*
           slobber-slobber   make.PAST-3SG
           'He slobbered.' (SK 562)

    d. *Käkčike*   *nixe-ini.*
           INTER   do-3SG
           'It goes crack (gnawing nuts).'

    e. *Coŋokti-le-ni*   *kälak*   *wo:-ni.*
           pendant-LOC-3SG   ringing   make.PAST-3SG
           'He made a ringing noise (touching) a pendant (on the dress).'
           (K 131)

Notice that the copulas *wo:-* and *nixe-* with the meaning 'make, do, go, happen' may also occur with other manner adverbs.

(1309) a.   *Gä:ŋa*   *dogbo-ni*   *ute*   *bede*   *ñexe-ini.*
           each   night-3SG   that   like   do-3SG
           'Every night it happens this way.' (K 28)

        b.   *Iñe-m*   *iñe-m*   *wo:-ini.*
           laugh-INF-   laugh-INF   make-3SG
           'He laughs very much.' (K 117)

17.2.2.6.4. Omission of the copula

Omission of the copula is a rare option in the construction in question. However, we have a few examples in our corpus, cf.:

(1310) a.   *Uta-digi*   *xaku*   *euge-me*   *ŋala*   *käu-käu.*
           that-ABL   right   pincers   arm   squeak-squeak
           'Then his arms were squeaking like pincers.' (K 105)

        b.   *Bi*   *zugdi:*   *sim-sim-de.*
           me   house.1SG   quiet-quiet-FOC
           'It is quiet in my house.'

        c.   *Tiŋmel'e*   *xegie-xi*   *ŋala*   *gamda-liu,*   *dili*
           fell.PERF   down-LAT   hand   together-ADV   head
           daŋda-liu-de.
           bending-ADV-FOC
           '(It) fell putting together its hands and bending its head.' (K 187)

        d.   *Daŋda-daŋda*   *kapt'a-si,*   *tu:*
           bandaged-bandaged   bandage.PERF-PC.SS   all
           kapta-ktu   *dili-ni*   *daŋda-daŋda.*
           bandage-RES   head-3SG   bandaged-bandaged
           'His head is all bandaged.'

17.2.3. Dative subject pattern

In copular sentences with the experiencer Dative noun phrase, the predicative element is expressed either by the experiential adjective (17.2.3.1) or occasionally by the Desiderative Infinitive (17.2.3.2). Both these constructions can be generally characterized as experiential, that is, denoting a temporary (physical) state. They do not occur in the non-Indicative moods. These constructions involve the personal copula *bi-* 'be' that takes the 3rd person Singular personal affix and is omitted in the Present tense. Note that the Dative

experiencer argument exhibits certain (but not all) subject properties and is therefore identified as a "subjectoid" in 15.1.3.

17.2.3.1. Experiential construction

The adjectives that are used as a predicative element of the experiential construction with the Dative experiencer are in (1311).

(1311)	*ge:*	'bad'		*aja*	'good'
	xekui	'hot'		*iŋeni*	'cold'
	safani	'boring'		*ug'ei*	'heavy'
	xeŋteni	'bored with'		*gili*	'chilly'
	seuni	'scary, frightening'		*xoköi*	'sweaty'
	xei	'tasty'		*sebzeŋke*	'cheerful, funny, interesting'

Basically the same set of adjectives can govern the impersonal infinitival complement clause and the experiencer-controlled complement clause (20.1.1).

Examples (1312) illustrate the Present tense with the copula dropped, example (1313) illustrates the Future tense, examples (1314) illustrate the 'become'-type copula.

(1312) a. *Mun-du   ketu   sebzeŋke.*
we-DAT   very   interesting
'We are very happy.'

    b. *Min-du   safani.* or: *Safa-ni min-du.*
me-DAT   boring   boring-3SG   me-DAT
'I am bored.'

(1313)   *Min-du   xekui   bi-zeŋe-ni.*
me-DAT   hot   be-FUT-3SG
'I will feel hot.'

(1314) a. *Käsa-du   ug'ei   ede-li-ge.*
eagle-DAT   heavy   become-INC-PERF
'It is becoming heavy for the eagle (to carry).'

    b. *Min-du   ge: ede:-ni.*
me-DAT   bad   become.PAST-3SG
'I started feeling bad.'

    c. *Jegdige-du   seuni: o:-ni.*
hero-DAT   scary   become.PAST-3SG
'It has become scary for the hero.' (K 182)

17.2.3.2. Desiderative construction

The predicative element corresponds to the Desiderative noun in *-mugdi* (8.2.3.2). The Desiderative noun denotes the desiderative state, that is, the wish for the performance of a corresponding action. Normally the issue here is the wish that pertains to a certain bodily physical activity, like eating or sleeping, while otherwise intentional suffixes (8.2.3.3) are used in this sense. The desiderative construction can be in the Present or Past tense. The Future tense is banned. In the Present tense the auxiliary verb is normally omitted. An example of the copula 'become' is (1316).

(1315) a.　*Nuan-du-ni*　　　　*ŋua-mudgi.*
　　　　　he-DAT-3SG　　　　sleep-DESN
　　　　　'He is sleepy.'
　　　b.　*B'ata-du*　*ŋua-mugdi.*
　　　　　boy-DAT　sleep-DESN
　　　　　'The boy is sleepy.'
　　　c.　*Min-du*　*ŋua-mugdi.*
　　　　　me-DAT　sleep-DESN
　　　　　'I am sleepy.'
　　　d.　*Minti-du*　*čaja-wa*　　　*umi-mugdi.*
　　　　　we-DAT　tea-ACC　　　drink-DESN
　　　　　'We feel like drinking some tea.'

(1316) *Bi　jexe-mugdi*　　　　*ede-li-e-mi.*
　　　　me　sing-DESN　　　　become-INC-PAST-1SG
　　　　'I felt like singing.'

There are also examples where in this construction the Present participle of the desiderative verb is used instead of the Desiderative noun in *–mugdi*.

(1317) *ŋua-mu:i*　　　　*ede-li-e-mi.*
　　　　sleep-DES.PRP　become-INC-PAST-1SG
　　　　'I started feeling sleepy.'

It is noteworthy that the experiencer of the desiderative state can be expressed not only by the Dative case but also by the Nominative case.

(1318) a.　*Nua-ni*　　*diga-mugdi*　*bi-si-ni.*
　　　　　he-3SG　　eat-DESN　　be-PAST-3SG
　　　　　'He wanted to eat.'
　　　b.　*Nua-ni*　　*ŋua-mugdi.*
　　　　　he-3SG　　sleep-DESN
　　　　　'He wants to sleep.'

The Dative and the Nominative seem to be completely synonymous and interchangeable in this case. The Dative marking of the experiencer may be an original Udihe feature, cf. the experiential construction 17.2.3.1. However, it is not completely excluded that the Nominative construction such as (1318) has been gradually replaced by the Dative construction under the influence of Russian syntax, where the corresponding sense is rendered with the Dative subject construction (*mne xočetsja* 'I would like to' literally 'it is wanted to me').

17.3. Nominal sentences

Nominal sentences are used when directly indicating an object and/or naming it. They do not involve a copula and normally consist of only one word:

(1319) a.   *Jala!*
            toad
            '(Look), a toad!'
       b.   *Ele   tete(-ni).*
            enough   end-3SG
            'That's the end (traditional tale ending)'.

Chapter 18
Complex sentences

In this chapter we focus on sentences that contain more than one predication but do not involve any non-finite verbal forms. Predicates in both components of the complex sentence are expressed by one of the finite tense/aspect/mood forms (on these see Chapter 7). Monoclausal coordinated structures (constituent conjunctions and disjunctions) are also addressed here. On non-finite subordinate clauses see Chapters 19, 20, and 21.

18.1. Conjunction

The principal means of constituent coordination is the enclitic additive particle -dA 'and' (12.1.1.3), which functions as both constituent and clausal coordinator. Occasionally the borrowed Russian conjunctions *i* 'and', *a* 'and, but', and *no* 'but' may be used. Conjunction may also be expressed by mere juxtaposition.

18.1.1. Constituent conjunction

On the coordination of postpositional phrases see 10.2.3.

18.1.1.1. Subject coordination

Subject coordination normally occurs through juxtaposition. The verb takes either the Plural (1320) or Singular (1321) agreement markers.

(1320) a. *Exi   siŋe   bagdi-e-ti.*
            frog   mouse   live-PAST-3PL
            There lived a frog and a mouse.
       b. *Jegdige   omo   ene-zi   sul'ai   tene*
            hero   one   side-INST   fox   CONT
            bagä:-za-nazi   ili-e-ti.
            other-N-INST   stand-PAST-3PL
            'The hero stood on one side, and the fox on the opposite side.'
            (K 151)

c. *Ila*   *ni:*   *men-e*   *tue-ze-digi-ni*   *ila*
three   man   REF-0   winter-N-ABL-3SG   three
ni: *xoŋto*   *tue-ze-digi-ni*   *Xu:n-dile*
man   other   winter-N-ABL-3SG   Khor-LOC
wakca-na:-ti.
hunt-DIR.PAST-3PL
'Three men from our dwelling and three men from another dwelling went hunting on the river Khor.'

d. *Uti etigi-ni*   *mama-ni*
that father.in.law-3SG   grandmother-3SG
od'o-ni   *ŋua-iti,*   *e-iti*   *dogdi-de.*
grandfather-3SG   sleep-3PL   NEG-3PL   hear-FOC
'Her father-in-law and mother-in-law, grandmother and grandfather sleep and do not hear.'

(1321) a. *Mamaka*   *aziga-la*   *digeŋ-ki-ni.*
old.woman   girl-CONT   hide-PAST-3SG
'The old woman and the girls have hidden.' (K 107)

b. *Bude-ili*   *mamaka*   *nada*   *kotoi-ti.*
die-3SG   old.woman   seven   bald-3PL
'The old woman and the seven bald ones died.'

c. *Si*   *abuga-i*   *eniŋe-i*   *sin-e-we*
you father-2SG   mother-2SG   you-0-ACC
wa:-ni.
kill.PAST-3SG
'Your father and mother killed you.'(K 196)

In the following example three embedded subjects are coordinated by means of the additive focus clitic *-dA*.

(1322) *Ami:-de*   *eni:-de*
father.2SG-FOC   mother.2SG-FOC
xa-nta-na-i-de   *bi-si:-si-ni*   *gele-je.*
sibling-N-PL-2SG-FOC   be-IM-PC-3SG   ask-IMP.2SG
'If you have a father, mother and siblings, call (them).' (SKX 232)

18.1.1.2. Modifier coordination

Coordination of non-attributive modifiers is a rare option in Udihe. It normally requires the repetition of the head noun according to the following pattern: (a + b) C → a C + b C, where *a* and *b* are modifiers and *C* is a head of the noun phrase. This is illustrated by (1323), where the possessive modifiers are coordinated.

(1323) a.   *Gaiti-de*   *seŋke*   *zegdige*   *imuti*   *zegdige*
         right-FOC   ledum   lighting   lard   lighting
         wo:-ni.
         make.PAST-3SG
         'Immediately he set alight the ledum and lard.' (K 189)

     b.   *Käŋa-da*   *ña:-wa-ni*   *nakta-da*
         deer-FOC   skin-ACC-3SG   boar-FOC
         ña:-wa-ni   *kai-ze-mi.*
         skin-SCC-3SG   brake-SUBJ-1SG
         'I will brake the skin of the deer and of the boar.'

     c.   *Teti-le*   *bi:*   *xulu*   *mo:-wo-ni*   *čafakta*
         here-LOC   be.PRP ash-tree   tree-ACC-3SG birch-tree
         mo:-wo-ni   *si*   *e-zi*   *ende.*
         tree-ACC-3SG   you   NEG-IMP.2SG touch
         'Don't touch the ash-tree and the birch-tree which stand here.'
         (SKX 120)

     d.   *Jegdige*   *tu:*   *wakča-i*   *ogbö*   *imo:-wo-ni*
         hero   all   hunt-PRP   elk   meat-ACC-3SG
         käŋa   *imo:-wo-ni*   *wa-l'a-si.*
         deer   meat-ACC-3SG   kill-V.PERF-PC.SS
         'The hero was always hunting providing elk and deer meat.'
         (SKX 212)

On fairly rare occasions the possessive modifiers may be coordinated by means of juxtaposition.

(1324) *ki'asa*   *eze-ni*   *ŋasaxi* *eze-ni* *neŋu-ti*
       eagle   tsar   heron   tsar   younger.sibling-3PL
       'younger siblings of the tsar of the eagles and the tsar of the herons'
       (SKX 214)

Attributive modifiers (adjectives) are easily coordinated without any additional devices, as shown below.

(1325) *Gazi-je*   *min-du*   *c'aligi* *seule-me*   *sexi-we.*
       bring-IMP.2SG   me-DAT   white   silk-ADJ   cloth-ACC
       'Bring me white silk cloth.'

18.1.1.3. Coordination of other constituents

Other major constituents can be coordinated with the additive focus clitic *-dA* 'and' which either follows each conjunct (1326), or only the last one (1327), as well as by means of juxtaposition (1328).

(1326) a.   *Exe*   *aja-wa-da*   *ge:-we-de*
           sister   good-ACC-and   bad-ACC-and
           wa:-mi   *bubu.*
           kill.PAST-1SG   EV
           'Sister, I have apparently killed both good ones and bad ones.'
           (K 127)

      b.   *Kawa*   *xo:-di-ni*   *saŋña sana-ni*   *tu:*
           tent   top-DAT-3SG   smoke   hole-3SG   all
           tu: jologo-i   *tue-de*   *zua-da.*
           all   open-PRP   winter-FOC   summer-FOC
           'The smoke opening on top of the tent was always open, in both
           winter and summer.' (SKX 286)

(1327) *E-zi*   *zawa*   *bi*   *in'ei-we-i*
        NEG-IMP.2SG   take   me   dog-ACC-1SG
        tuxi-we-i-de.
        sledge-ACC-1SG-and
        'Don't take my dogs and my sledge.'

(1328) a.   *B'ata-ŋi-ni*   *gele-ini*   *bei-ne-mi*
           son-AL-3SG   ask-3SG   bow-DEST-REF
           zanta-na-mi.   *Ami-ni*   *wo:-ni*
           arrow-DEST-REF   father-3SG   make.PAST-3SG
           bei-we   *zanta-wa.*
           bow-ACC   arrow-ACC
           'His son asks for the bow and arrows. His father made a bow and
           arrows.' (K 167)

      b.   *Nua-ni*   *jexe:-ni*   *škola-du*   *kuluba-du.*
           he-3SG   sing.PAST-3SG   school-DAT   club-DAT
           'He sang at school and in the club.'

      c.   *Tege-zi*   *au-zi*   *tutulu xuli:-ni.*
           gown-INST   cap-INST   always   walk-3SG
           'He always walks in a gown and a cap.'

      d.   *Miki-du*   *zabda-du*   *mala-u-ze-i.*
           adder-DAT   grass.snake-DAT   finish-PAS-SUBJ-1SG
           'I will be eaten by adders and grass snakes.' (SK 534)

      e.   *Sakta-la*   *ja:-na-ni*   *aŋma-na-ni*
           willow-LOC   eye-DEST-3SG   mouth-DEST-3SG
           kusige-zi   *mine-ini.*
           knife-INST   carve-3PL
           'He carves the eyes and mouth (of an idol) with the knife in the
           willow.' (SK 365)

When the coordinated constituents are not adjacent to each other, the last conjunct is extraposed to the position after the finite verb and must be followed by the clitic *-dA* 'and'.

(1329) a. *Loŋko-wo*   *zawa-ja*   *käfakti-we-de.*
            pot-ACC   take-IMP.2SG   bell-ACC-and
            'Take the pot and the bells'.

     b. *Ule:-we*   *joxo*   *do-lo-ni*   *nede-iti*
            meat-ACC   pot   inside-LOC-3SG   put-3PL
            ulikte-we-de   *olokto-lo:-ni.*
            shaman.lard-ACC-and   cook-PURP-3SG
            'They put meat and shaman lard in the pot in order to cook (them).'

The examples below demonstrate that for certain semantically fixed conjoined expressions (*abuga eniŋe* 'father and mother') case marking appears only on the second conjunct. It is not entirely clear how far this phenomenon goes. Cf. also *dogbo-li-ŋa ineŋi-ne* 'day and night' (SK 376) <night-PROL-FOC day-3SG>.

(1330) a. *ŋene-ze-fi-ge*   *bi*   *eniŋe*
            go-SUBJ-1PL.IN-HORT   me   mother
            abuga-tigi: *ge.*
            father-LAT.1SG   HORT
            'Let us go to my mother and father.' (K 197)

     b. *Exi-ni*   *abuga* *eniŋe-tigi*   *teluŋu-si-e-ni.*
            sister-3SG   father   mother-LAT   story-V-PAST-3SG
            'The elder sister told it to the father and the mother.' (K 139)

Less frequently, constituents may be coordinated by means of the repetition of the VP, that is, (a + b) C → a C + b C, where *a* and *b* are coordinated constituents and *C* is a verb.

(1331) *E:xi-ni*   *edi-we*   *gele-li-e-ni,*
        elder.sister-3SG   wind-ACC   ask-INC-PAST-3SG
        agdi-we   *gele-li-e-ni.*
        thunder-ACC   ask-INC-PAST-3SG
        'The elder sister started calling the wind and the thunder.' (SKX 100)

18.1.2. Clausal conjunction

Coordinated clauses that share a constituent are addressed in 18.1.2.1. If the conjoined clauses do not share a constituent, they are coordinated by means of juxtaposition. However, the criteria here are very subtle: it is not always clear

whether two clauses should indeed be analyzed as a coordinated structure. In certain cases, the only formal criterion that can be suggested is prosodic: the pause between the conjoined clauses is shorter than between two independent clauses, and the sentence intonation does not fall until the end of the second conjunct. We will illustrate only the most obvious case here, namely the coordinated clause that semantically modifies an element of the matrix clause (18.1.2.2) and the conjoined embedded clauses (18.1.2.3).

18.1.2.1. Coordinated clauses with a shared constituent

18.1.2.1.1. Shared predicate

Constructions with a shared predicate require it to be repeated: (a + b)C → aC + bC, where *C* is a predicate and *a* and *b* are coordinated subjects. The additive focus particle *-dA* (12.1.1.3) is the usual means of coordinating such clauses. The particle is cliticized either to subjects of both conjuncts (1332), or only to the subject of the second conjunct (1333).

(1332) a. *Ic'a-ŋku-de*　　　　*bie*　　　　　　*sagdä-ŋku-de*
　　　　　small-PL-FOC　　　be.PRES.HAB　　　big-PL-FOC
　　　　　bie.
　　　　　be.PRES.HAB
　　　　　'There are small ones and large ones as well.'
　　　b. *Bi-de*　　*e-si-mi*　　　　　　*bude*
　　　　　me-FOC　NEG-PAST-1SG　　die
　　　　　nua-da　*e-si-ni*　　　　　　*bude.*
　　　　　he-FOC　NEG-PAST-3SG　　die
　　　　　'I didn't die, and she didn't die either.' (K 134)

(1333) *Nua-ni　ja:-ŋi-ni*　　　*uligdig'a-i*　　*bi*　　*ja:-ŋi:-de*
　　　　he-3SG　cow-AL-3SG　beautiful-FOC　me　　cow-AL.1SG-FOC
　　　　uligdig'a.
　　　　beautiful
　　　　'Her cow is beautiful, my cow is beautiful too.'

The following examples illustrates coordination of predicative elements within copular constructions and periphrastic temporal constructions, which involve mere juxtaposition of coordinated elements.

(1334) a. *Bi-de*　　*ami-xi*　　　　*eni-xi*　　　　*bi-s'e-i.*
　　　　　me-FOC　father-PROP　mother-PROP　be-PERF-1SG
　　　　　'I also used to have father and mother.' (SK 105)
　　　b. *Umu-i*　　　*umu-le-gie*　　*tege-i*　　　*teti-gie*
　　　　　belt-REF　belt-V-REP　　gown-REF　dress-REP

o:-ni.
make.PAST-3SG
'He put on a belt and a gown.' (SK 703)

c. *Zuŋe*   *eh-le-ni*   *uke-zi*   *sagdi*   *bi-si-ni.*
both   side-LOC-3SG door-INST   big   be-PAST-3SG
'It was large and had doors on both sides.' (SKX 78)

18.1.2.1.2. Shared adverbial

As can be seen from (1335), the shared adverbial normally occupies the sentence-initial position, that is, it precedes both conjuncts. In (1335a) the locational adverbial *odu* 'here' and in (1335b) the temporal adverbial *tue* 'in winter' take scope over both conjoined clauses.

(1335) a. *O-du*   *sugdä:*   *bie*   *bui* *egdi.*
this-DAT   fish   be.PRES.HAB   animal many
'Here there are fish, there are a lot of animals.'

b. *Tue*   *mun-du*   *ima:* *egdi* *ketu* *iŋini.*
winter   we-DAT   snow much very cold
'In winter we have a lot of snow, it is very cold.'

In the following sentence the subjects of two clauses sharing an adverbial take the focus particle *-dA*.

(1336) *Oñokto* *bua-di-ni*   *mo:-do*   *e-i*
sand   place-DAT-3SG   tree-FOC   NEG-PRP
bagdi, *uli-de*   *wača,* *tu:* *ogo:-ni.*
live   water-FOC little all dry.PAST-3SG
'In a desert trees do not live, there is little water, and everything dries out.' (SK 711)

18.1.2.1.3. Shared subject

Shared subject constructions are normally expressed by non-finite verbal forms, namely, by converbs and infinitives with the coordinative function (Chapter 21); therefore coordination of finite clauses with a shared subject is not very common. However, the contrastive conjoined clause with the focus particle *dele* 'or else, otherwise' is fairly regular (see 12.1.1.6). Examples of some other coordinated clauses that share the subject are presented below. There are three variants of such coordinations: (i) by juxtaposition (1337); (ii) by the coordinator *-dA* following predicates in both conjoined clauses (1338);

and (iii) by the coordinator *-dA* following the predicate of the last conjunct (1339).

(1337) a.   *Uti*   *tekpu-we-ni*   *kapta-gi-e-k,*
          that   skin-ACC-3SG   wrap-REP-PAST-EXPR
          men-e   *konz'oi-ziga-la-i*   *ne:-gi-e-k,*
          REF-0   box-DIM-LOC-REF   put-REP-PAST-EXPR
          jeuce-le-gi-e-k.
          lock-V-REP-PAST-EXPR
          'She wrapped that skin, put it in her little box and locked it.'
    b.   *Zeuŋe*   *asi*   *bou*   *monto-ligi.*
          greenling   very   fat   round-ADJ
          'Greenling (a sort of salmon) is very fat and round.'

(1338) *Teu jexe-ini*   *ei-de*   *etete.*
      all sing-3SG   NEG-FOC   work
      'He only sings, and does not work.'

(1339) *Škola-du*   *tatusi-u*   *gusi-u-de.*
       school-DAT   study-1PL   play-1PL-FOC
       'At school we learn and play.'

As argued in 15.1.1 and 22.2.1.2 and illustrated again by the examples in this section, only the subject can control the coreferential null across the conjoined clause.

18.1.2.2. Coordinated modifier

Udihe is characterized by a large number of conjoined clauses that do not formally share a constituent, but are closely connected in concept, and sometimes also through certain anaphoric devices. In European languages such conjoined clauses would most probably correspond to one clause with a complex structure. This is especially true when the second conjoined clause describes one of the participants of the first clause, which would correspond to a modifying structure or a relative clause in European languages.

18.1.2.2.1. Coordinated "relative clauses"

As discussed in Chapter 19, like other grammatical relations, the possessor can be relativized with one of the two regular relativization strategies: the internal strategy (19.2.2.2) and the external strategy (19.1.2.3). However, such constructions are dispreferred by speakers due to their structural complexity,

and are gradually replaced by finite clauses that correspond in meaning to the relative clause, but are conjoined to the main clause. In such cases the possessor is found within the first conjunct while the second conjunct contains an anaphoric means that refers to it, normally a possessive affix and optionally an anaphoric pronoun. For the resulting sentence two translations are equally acceptable; either with a relative clause, or as a coordinated structure.

(1340) a.   *Ei   a:nta*   *bie*   *uti*   *zugdi-di-ni*
         this   woman   be.PRES.HAB   [that   house-DAT-3SG
         bagdi-mi.
         live-1SG]
         'This is that woman in whose house I live.'
         'This is that woman, I live in her house.'

      b.   *Bi   sa:-mi*   *omo*   *ni:-we*   *aziga-ŋi-ni*
         me   know-1SG   one   man-ACC   [girl-AL-3SG
         Moskva-tigi   *ŋene:-ni.*
         Moscow-LAT   go.PAST-3SG]
         'I know one man whose daughter went to Moscow.'
         'I know one man, his daughter went to Moscow.'

      c.   *ŋene-je*   *uti*   *a:nta-tigi*   *sita-ni*
         go-IMP.2SG   that   woman-LAT   [child-3SG
         uni:-ni.
         be.ill-3SG]
         'Go to that woman whose child is ill.'
         'Go to that woman, her child is ill.'

Further cases of a coordinated clause with a modifying meaning are presented below. For example, in (1341a) and (1341b) the conjoined clauses 'ten meters high' and 'lives in the earth' respectively semantically modify an element of the first conjunct.

(1341) a.   *Bi   bagdi-mi*   *ei*   *zugdi-le*   *za:*   *metra*
         me   live-1SG   this   house-LOC   ten   meter
         gugda-la-ni.
         high-N-3SG
         'I live in this house ten meters high.'

      b.   *Silikte-tigi   gualana:-ni.*   *Xuta-ligi*   *silikte-tigi*
         worm-LAT   turn.PAST-3SG   red-ADJ   worm-LAT
         na:-la   *bi:.*
         earth-LOC   be.PRP
         'She turned into a worm. Into a red worm which lives in the earth.'

      c.   *Nua-ni*   *gazi-e-ni*   *in'ei-we*   *ke:-de*
         he-3SG   bring-PAST-3SG   dog-ACC   vicious-FOC

> *e-ini*   *bie.*
> NEG-3SG   be.PRES.HAB
> 'He brought a dog that was not vicious.'

18.1.2.2.2. Negative possessive modifier

A negative possessive modifier is typically expressed in a coordinated structure by means of the Partitive forms (on them see 4.3.2). In (1342) the second clause *p'a:-la anči* 'there are no windows' refers to the element of the first clause *zugdi* 'house'. Although no anaphoric means indicates this reference, it is conceptually clear and can be rendered by a noun phrase within a single clause as 'a house without windows.' In (1342b) in a similar situation the personal marker refers to the element of the first clause: *zawaŋku-ni anči*, literally 'there is no its handle', where 'its' anaphorically refers to the element of the first conjoined clause *mulexi* 'bucket'. In (1342c) there are two coordinated negative possessive modifiers.

(1342) a. *Nua-ni*   *ŋua-ini*   *zugdi-du*
     he-3SG   sleep-3SG   house-DAT
     p'a:-la   *anči.*
     window-PART   no
     'He sleeps in a house without windows.'

   b. *Teugi-je*   *tuduze-we*   *mulexi*
     put-IMP.2SG   potato-ACC   bucket
     do-lo-ni   *zawaŋku-ni*   *anči.*
     inside-LOC-3SG   handle-3SG   no
     'Put the potatoes in the bucket without a handle.'

   c. *Boxo*   *zoŋčile:-ni*   *namu*   *tatauxi*
     Boxo   throw.PAST-2SG   sea   open
     gaula-de   *anči*   *seule-de*   *anči-de.*
     pole-FOC   no   oar-FOC   no-FOC
     'Boxo threw (him) in the open sea without a pole or an oar.'
     (SKX 278)

18.1.2.3. Conjoined embedded clauses

Embedded clauses are conjoined by means of juxtaposition (1343a) or by repetition of the main clause (1343b).

(1343) a. *Maŋga*   *edi-ne-li:-si-ni*   *mo:*
     strong   wind-V-INC-PC.DS-3SG   tree

> *tiŋme-ne-li:-si-ni*   *bi*
> fall-DIST-INC-PC-DS-3SG   me
> *aŋma-tigi*   *je:-u.*
> mouth-LAT   enter-IMP.2PL
> 'After the strong wind begins and the tree falls, enter my mouth.'
> (SKX 324)

b.   *Ag'a-fai*   *boi-se-we-ni*
       elder.brother-REF   tie.down-PP.PAS-ACC-3SG
       ise:-ti,   *kawa-tigi*   *xeke:-me-ti*
       see.PAST-3PL   tent-LAT   tie.PP-ACC-3PL
       ise:-ti.
       see.PAST-3PL
       'They saw that their elder brother was tied down and that they had
       tied him to the tent.' (SKX 252)

18.1.3. Conjunction under the scope of negation

Constituents within one clause cannot be conjoined under the scope of
negation, so the meaning 'neither ... nor' is always conveyed by a biclausal
structure: (a + b)C → aC + bC where *C* is negation and *a* and *b* are coordinated
constituents. In a sentence they are often followed by the clitic particle *-dA*
(1344a).

(1344) a.   *Ni:*   *xokto-ni-de*   *anči,*   *bui*
            man   footstep-3SG-FOC   no   animal
            xokto-ni-de   *anči.*
            footstep-3SG-FOC   no
            'There are neither a man's footsteps, nor an animal's footsteps.'
            (K 148)

    b.   *Sugzä:-da*   *e-mu*   *diga*   *ule:-de*
            fish-and   NEG-1PL.EX   eat   meat-and
            e-mu   *diga.*
            NEG-1PL.EX   eat
            'We eat neither fish nor meat.' (K 174)

(1345) *Zugdi-le*   *i:-e-ti,*   *abuga anči,*   *eniŋe anči.*
        house-LOC   enter-PAST-3PL   father no   mother no
        'They entered the house; there is neither father nor mother (there).'

18.2. Disjunction

Disjunctive structures are expressed by several particles and conjunctions glossed as DIS (disjunction). On disjunctive questions see 23.1.4.

18.2.1. Constituent disjunction

Constituent disjunction is fairly rare. It can be expressed by the disjunctive coordinator *-kA ...-kA* 'either ... or', which cliticizes to the disjoint constituents (1346a), with the additive focus clitic *-dA* on each conjunct (1346b), or by means of juxtaposition (1347).

(1346) a.   *Da:-ka*   *go:-ko*   *bagdi-mi.*
          short-DIS   long-DIS   live-INF
          'They lived for a short time or for a long time.' (K 160)

    b.   *Degdi-le-ni*   *mo:-mo-do*   *taluga-ma-da*
          face-LOC-3SG   tree-ADJ-FOC   birch.bark-ADJ-FOC
          ni: *degde-we-ni*   *tet-u-iti.*
          man   face-ACC-3SG   put-CAUS-3PL
          'On their face they put a mask made of wood or birch bark.' (SKX 294)

(1347) a.   *Men-e*   *exi-fei*   *neŋu-fei*
          REF-0   elder.sister-REF.PL   younger.sister-REF.PL
          za:gi-e-ti   *men-tigi.*
          fetch-PAST-3PL   REF-LAT
          'They fetched their elder sister or their younger sister.' (SKX 288)

    b.   *Bi   dogbo   ise-ze-mi*   *j'eu*   *je:-xi*   *je:-le*
          me   night   see-SUBJ-1SG   what   horns-PROP   horns-PART
          anči   *bui*   *bi:-we-ni?*
          no   animal   be.PRP-ACC-3SG
          'I can't see in the night whether an animal has horns or not, can I?' (SK 117)

18.2.2. Clausal disjunction

Clausal disjunction is more frequent and often corresponds to constituent disjunction in European languages.

18.2.2.1. Disjunctive coordinator -*As(i)* .... -*As(i)* 'either ... or'

The particle -*Asi* ... -*Asi* 'either ... or' normally pronounced with a reduction of the final vowel as -*As* ... -*As* is used as a clausal disjunctive coordinator, which follows predicates in both disjoint clauses. This particle causes the lengthening of the final vowel, while when it follows the vowel /*i*/ the resulting form has the long vowel /*ie*/. Semantically such disjoint clauses typically share the predicate, and the same verb is repeated twice.

(1348) a.　　*Bi　bude-ʐe-mi-es*　　　　*si*　　*bude-ʐeŋe:-s.*
　　　　　　　me　die-SUBJ-1SG-DIS　　you　　die-FUT-DIS
　　　　　　　'Either I will die, or you will die.'

　　　　b.　*ŋene-mi*　　*da:-la*　　　*ŋene:-ti-es*
　　　　　　go-INF　　　short-LOC　　go.PAST-3PL-DIS
　　　　　　go:-lo　　　*ŋene:-ti-es*　　　　*we:-le*
　　　　　　long-LOC　　go.PAST-3PL-DIS　　mountain-LOC
　　　　　　i:ŋ-ki-ti.
　　　　　　come-PAST-3PL
　　　　　　'While they were walking, they were walking either short or long, and came to the mountain.' (K 172)

In the following example the disjunctive coordinator conjoins two headless relative clauses.

(1349) *Teluŋu-si-li-e-ni*　　　　　　　*bie-we-ni-esi*
　　　　tell-IM-INC-PAST-3SG　　　　be.PRP.HAB-ACC-3SG-DIS
　　　　anči-we-ni-esi.
　　　　no-ACC-3SG-DIS
　　　　'He started telling (us) about what exists or (perhaps) doesn't exist.' (SKX 248)

18.2.2.2. Disjunctive coordinator -*kA* .... -*kA* 'either ...or'

The coordinator -*kA* ... -*kA* is used in clausal disjunction as the only coordinator (1350) or in combination with the coordinator -*As(i)* ... -*As(i)* (1351). While the latter always follows the predicate (two predicates of two disjoint clauses), the former follows another constituent (an argument) that expresses one of the alternatives. The predicates are always formally identical in both clauses. Although such sentences correspond semantically to a constituent disjunction, they are formally biclausal.

(1350) *Nakta-wa-ka*　　　　　　*ise:-mi*　　　　　*pauza-wa-ka*
　　　　boar-ACC-DIS　　　　　see.PAST-1SG　　sheep-ACC-DIS

ise:-mi.
see.PAST-1SG
'I saw either a boar or a sheep.'

(1351) a. *Eineŋi-ke   gulin-ze-u-es   timana-ni-ke*
           today-IND   go-SUBJ-1PL.IN-DIS   tomorrow-3SG-IND
           gulin-ze-u-es.
           go-SUBJ-1PL.IN-DIS
           'We will leave either today or tomorrow.'
       b. *Nakta-wa-ka   ise:-ni-es*
           boar-ACC-DIS   see.PAST-3SG-IND
           j'e-we-ke   ise:-ni-es.
           what-ACC-IND   see.PAST-3SG-DIS
           'He saw either a boar, or something else.'
       c. *Zaŋdalafu-ke   bi:-ni-es   j'eu-ke   bi:-ni-es.*
           Zandalafu-DIS   be-3SG-DIS   what-DIS   be-3SG-DIS
           'This is Zandalafu, or somebody else.'

The following example illustrates that the clitic *-dA … -dA* can be also used in
a disjunctive function, at least by disjunction of two non-finite clauses.

(1352) *Xekui bi:-we-ni-de   gili   bi:-we-ni-de*
        hot   be.PRP-ACC-3SG-FOC   cold   be.PRP-ACC-3SG-FOC
        akta-masi-mi.
        try-DIS-1SG
        'I am checking whether it is hot or cold.' (S 661)

18.3. Subordination

As shown in Chapters 19, 20, and 21, the normal way to express subordination
is through a non-finite clause, based on participles, converbs, or infinitives.
Subordination expressed by a finite clause is quite rare, and, as in the case of
coordination (18.1), when two finite clauses are adjacent to each other it is not
always apparent whether we are dealing with a complex structure or two
independent sentences. As was mentioned in 18.1.2, in such instances we can
rely on prosodic criteria. This section deals only with more or less transparent
cases (mostly finite complement clauses and some types of relative clauses),
although some less clear examples can also be found. Adverbial finite clauses
seem not to exist in Udihe.

18.3.1. Complement clauses

This section addresses finite complement clauses, except for subordinate questions described in 23.1.4. A finite complement clause is governed by verbs of perception (18.3.1.1), verbs of thinking (18.3.1.2), verbs of saying (18.3.1.3), and experiential adjectives (18.3.1.4). For these verbs the subordinate finite complement clause is either the only available valence pattern, or is possible together with a non-finite complement clause (Chapter 20). The finite complement clause may follow or precede the matrix verb, and in rare cases it can also be found clause-internally, that is, when it is surrounded by elements of the superordinate clause.

18.3.1.1. Perception verbs

The following verbs are able to take a finite complement clause, although they more normally co-occur with a participial complement clause (Chapter 20).

(1353) *ise-*   'see'   *düisi-*   'hear'
      ise-si-   'look at'   *t'osi-*   'dream'
      sau-pte-   'be known by'

Evidential particles (12.1.2.1) may optionally be present within the finite subordinate clause, although they are not required by any grammatical rules. If the evidential particle is present, as in (1355) below, it is basically redundant since the verbs of perception themselves indicate the source of information.

(1354) a.   *Mafa*   *oŋko-si:-ni*   *ise:-ni.*
           [bear   pasture-IM-3SG]   see.PAST-3SG
           'He saw that the bears were pasturing.' (K 130)
   b.   *Bi t'osi-mi*   *minti sita-fi*   *eme-zeŋe-ni.*
           me dream-1SG   [we.IN son-1PL.IN   come-FUT-3SG]
           'I was dreaming that our son would come.'
   c.   *T'osi:*   *nada kotoi-ti*   *eme-iti.*
           dream.PRP   [seven bald-3PL   come-3PL]
           'She is dreaming that seven bald ones are coming.'

(1355) a.   *Saŋa*   *culi*   *ise-si-e-ni*   *zu:*   *belie*
           hole   through   see-IM-PAST-3SG   [two   girl
           ŋen'e   *gune*   *tuxi-we*   *xebu-s'e.*
           walk.PERF EV   sledge-ACC   carry-EXP.PERF]
           'He looked through the hole (and saw): two girls are coming carrying a sledge.' (K 110)

b. *Ise-si-e-ni*   *bagä:-za-tigi*   *belie-n(i)-de*
see-IM-PAST-3SG   other-N-LAT   [girl-3SG-FOC
te:gi-e-ni   *gune.*
sit-PAST-3SG   EV]
'He looked at the opposite side (and saw that): a girl was sitting (there).' (K 144)

c. *Nua-ni*   *sau-pte-ini*   *ketu*   *mei*   *wakca-i*
he-3SG   know-DEC-3SG   [very   strong hunt-PRP
ni: *gumu.*
man   EV]
'It is known about him that he is a very good hunter.'

18.3.1.2. The verb *muisi-* 'think'

The verb of thinking *muisi-* 'think' cannot govern a non-finite subordinate clause and is not therefore mentioned in Chapter 20. It only introduces a finite subordinate clause followed by an evidential particle (normally, *gumu* or, less frequently, *bize*). The absence of this particle results in robust ungrammaticality.

(1356) a. *Muisi-mi*   *ei*   *a:nta*   *soŋo-ini*   *gumu.*
think-1SG [this   woman   cry-3SG   EV]
'I think that this woman is crying.'

b. *Nua-ni*   *muisi:-ni*   *uli*   *teu*   *xa:-ni*
he-3SG   think-3SG   [water all   boil.PAST-3SG
gumu.
EV]
'He thinks that all the water has boiled away.'

(1357) *Bi* *muisi-mi*   *nua-ni*   *eme-gi-e-ni*   *bize.*
me think-1SG [he-3SG   come-REP-PAST-3SG   EV]
'I think that he must have come.'

Like other sentences introduced by non-factive verbs, subordinate clauses governed by the verb *muisi-* follow the sequence of tenses. If the event of the subordinate clause is prior to the event in the past described by the superordinate clause, this is expressed by the Pluperfect verb in the subordinate clause (1358). If the superordinate clause refers to the past, and the event of the subordinate clause is posterior in time with respect to it, this is expressed by the Subjunctive in the subordinate clause (1359).

(1358) *Ñ'ädiga*   *muisi-e-ni*   *si*   *nuan-di-ni*
Nadiga   think-PAST-3SG   [you   he-DAT-3SG

kesi-we	*bu-o:*	*bi-s'e-i*	*gumu.*
luck-ACC	give-PP	be-PERF-2SG	EV]

'Nadiga thought you brought him good luck.'

(1359) a.	*Bi*	*muisi-e-mi*	*eineŋi*	*si*
	me	think-PAST-1SG	[today	you

	emegi-ze-i	*gumu.*
	come-SUBJ-2SG	EV]

'I thought you would come today.'

b.	*Bi*	*zua*	*emegi-ze*	*gumu*	*muisi-e-mi.*
	me	[summer	come-SUBJ	EV]	think-PAST-1SG

'I thought he would come in the summer.'

18.3.1.3. Verbs of saying

The verb *gun-* 'say' is usually located to the right of the finite subordinate clause, which in this case is not followed by any evidential elements. In some contexts the meaning of this verb is rather 'think' (1360c).

(1360) a.	*Kuti*	*käŋa-wa*	*diga-ini*	*gun-e-iti.*
	[tiger	deer-ACC	eat-3SG]	say-0-3PL

'They say that the tiger eats deer.'

b.	*Abu-ziga*	*ebede*	*ŋua-i*	*bi-s'e*
	[ancestor-PL	so	sleep-PRP	be-PERF]

gun-te-i-ze.
say-PERM-2SG-HORT

'Tell (him) that our ancestors used to sleep this way.' (K 106)

c.	*Zaŋdalafu*	*gune-mi-de*	*ei*	*sa:*
	[Zandalafu]	think-INF-FOC	[NEG	know]

sigi-li-e-ti.
brake-INC-PAST-3PL

'Thinking that Zandalafu does not know, they started to brake him.'(K 107)

Verbs of saying other than *gun-*, such as *dian-* 'say' in (1361a) and *teluŋusi-* 'tell' in (1361b) usually precede the subordinate clause. The evidential particle *gumu* is normally located immediately to the right of the subordinate clause.

(1361) a.	*Ni:*	*dian-a-iti*	*kuti*	*pauza-wa*	*diga-ini*
	man	say-0-3PL	[tiger	roe-ACC	eat-3SG

gumu.
EV]

'People say that the tiger eats roes.'

b. *Bi   abuga-tigi:*   *teluŋu-si-e-mi*
    me   father-LAT.REF   story-V-PAST-1SG
    Iwana-wa   bele-zeŋe-i   gumu.
    [Ivan-ACC   help-FUT-1SG   EV]
    'I told my father that I will help Ivan.'

The verb *dian-* 'say' may mean 'say something about somebody' and takes two
non-subject arguments, one of which is expressed by the Accusative and
another corresponds to the finite embedded clause:

(1362) *Nua-ma-ni   dian-ki-ti   ketu   mei   wakca-i*
       he-ACC-3SG   say-PAST-3PL   [very   strong hunt-PRP
       ni: gumu.
       man   EV]
       'They say about him that he is a very good hunter.'

The third argument of the verb *teluŋusi-* 'tell something to somebody' is in the
Dative, cf.:

(1363) *Uti   ni:-du   teluŋu-sie   Lugi   belie*
       that   man-DAT   story-V.IMP.2SG   Lugi   fairly
       sin-e-we   ah-ini.
       you-0-ACC   chase-3SG
       'Tell this man that the fairly Lugi is chasing you.' (SKX 96)

18.3.1.4. The verb *ŋele-* 'be afraid'

The verb *ŋele-* 'be afraid' may introduce a participial complement clause
(Chapter 20) and – in a different subject situation – a finite clause where the
verb is in the Future or Subjunctive:

(1364) *Bi   ŋele-mi   Iwana   eme-zeŋe-ni*
       me   be.afraid-1SG   [Ivan   come-FUT-3SG
       (or: *eme-ze*)   *gun-e-mi.*
       (come-SUBJ)   say-0-1SG]
       'I am afraid Ivan will come.'

18.3.1.5. Experiential adjectives

Certain experiential adjectives among those listed in (17.2.3.1) introduce a
finite subordinate clause that is not controlled by any element of the

superordinate clause. In particular, it cannot be controlled by the Dative experiencer, as can non-finite infinitival subordinate clauses (20.1.1.3).

(1365) a. *Abuga-i*   *wakca-na-ini*   *min-du-de*
   [father-1SG   hunt-DIR-3SG]   me-DAT-FOC
   aja.
   good
   'It is nice for me that the father is going hunting.'

 b. *Su* *ute* *bede* *dian-a-i* *min-du-de*
   [you that like speak-0-2PL] me-DAT-FOC
   ge:
   bad
   'It is bad for me that you speak this way.'

 c. *Min-du* *xeŋteni* *ede:-ni*   *min-e-we*
   me-DAT boring become.PAST-3SG [me-0-ACC
   gele-ini.
   ask-3SG]
   'I am bored that he keeps asking me.'

 d. *A:nta* *jexe-ini* *min-du* *sebzeŋke.*
   [woman sing-3SG] me-DAT interesting
   'I am interested in this woman's singing.'

18.3.2. Relative clauses

The Relative clause is typically non-finite (Chapter 19). Quite regularly a finite relative clause is only used in these two cases: when it is a generalized relative clause (18.3.2.1), or an equative relative clauses (18.3.2.2).

18.3.2.1. Generalized relative clause

Generalized relative clauses express a non-specific indefinite meaning. They have an empty head the reference of which is determined by the relative clause itself. In other words, they express a proposition which refers to the whole class of objects defined by the relative clause, such as, for example, in *j'e-digi-de eme-gi:-si* 'wherever I come from' <what-ABL-IND come-REP-PC.1SG>. Structurally, the generalized relative clause can be both finite and non-finite. Examples of non-finite generalized relative clauses are presented in 19.5.2.

In all types of generalized relative clauses an indefinite non-specific pronoun is present (see section 9.6.2 on the morphology of such pronouns). It denotes the class of objects that the generalized relative clause describes, and takes the corresponding morphological form. The superordinate clause may contain its

overt semantic correlate, but this is not necessary. Examples (1366) show the finite generalized relative clause.

(1366) a.   *Nua-ni*   *teu*   *nixe:-ni*   *min-tigi*
            he-3SG   all   do.PAST-3SG   [we-LAT
            j'e-we-de   *diaŋ-ki-ni.*
            what-ACC-IND   say-PAST-3SG]
            'He did everything he told us.'
    b.   *Ono-do*   *ja: sin-e-we*   *uisigi-zeŋe-i*   *bi.*
            [how-IND PROV]   you-0-ACC   rescue-FUT-1SG   me
            'Whatever happens, I will rescue you.' (K 188)
    c.   *Ali-de*   *bagdi:*   *min-du*   *wo-u-ze-i.*
            [where-IND   live.2SG] me-DAT   kill-PAS-SUBJ-1SG
            'Wherever you live, I will kill you.' (K 163)
    d.   *J'eu*   *ba:-dexem*   *ŋeni:*   *exi-mi*
            [what   place-IND   go.PRP]   sister-REF
            gene-gi-ze-mi.
            bring-REP-SUBJ-1SG
            'I will bring my sister back, wherever she has gone.'

18.3.2.2. Equative relative clause

The equative relative clause is finite and corresponds to the correlative structure with the correlative anaphoric pronoun *(u)ti* 'that' (22.1.2.2). Non-finite correlative clauses are addressed in 22.1.3.

(1367) a.   *Nua-ni*   *uti*   *xoton-digi*   *eme-gi-e-ni*
            he-3SG   that   city-ABL   come-REP-PAST-3G
            si   *anana*   *uta-du*   *bagdi-e-i.*
            [you   long.ago   that-DAT   live-PAST-2SG]
            'He came from the same city you used to live in.'
    b.   *Ono*   *bi-si-ni*   *ono*   *bejeku-zi*
            how   be-PAST-3SG   how   similar-INST
            wo-gi-ze-m(i).
            make-REP-SUBJ-1SG
            'I will make (it) as it used to be.' (K 188)
    c.   *J'e-le*   *mo:*   *bi-si-ni*   *ta-la*   *ŋua.*
            what-LOC   tree   be-PAST-3SG   that-LOC   sleep
            'One would sleep where there were trees.'
    d.   *J'e-le*   *mo:*   *og'ou*   *bi-si-ni*   *ta-la*
            what-LOC   tree   dry   be-PAST-3SG that-LOC

    aŋa-si:.
    night.shelter-V.PRP
    'One used to make a night tent where there were dry trees.'

e. *J'e-le*   *bui* *egdi* *bi-si-ni ta-la*
  what-LOC animal many be-PAST-3SG that-LOC
  bagdi:.
  live.PRP
  'One used to live where there were many animals.'

f. *Ni*   *zomi:*   *bi:-si-ni*   *uti*
  who steal.PRP   be-PAST-3SG   that
  ŋala-ni *kokci-zaŋa-ni.*
  hand-3SG get.crooked-FUT-3SG
  'He who steals something, his hand will become crooked.'

The meaning 'the more .... the more' is expressed by means of repetition of the adverb *eli* 'soon':

(1368) *Eli* *sagdi* *ede-ini*   *eli* *aja-zi*
    soon big   become-3SG soon good-INST
    mä:usa-la-ini.
    gun-V-3SG
    'The more grown up he becomes, the better he can shoot.'

18.4. Direct speech

Verbs of reporting that usually introduce direct speech are the following:

(1369) *teluŋusi-* 'tell'   *gun-*   'say'
    xaundasi- 'ask'   *dian-* 'say'
    xetinde- 'shout' *kaja-* 'order'
    bodosi- 'think' *daŋisi-* 'curse'

Their phonetic form appears to be dependent on their position in the sentence. If they precede a direct speech quotation, they are usually pronounced with an emphatic non-phonemic lengthening of the final vowel (2.1.5.1, 2.1.5.2), as, for example: *teluŋu-si-e-nie* (< *teleŋu-si-e-ni*) 'he told' <story-V-PAST-3SG>. On the other hand, when they follow a quotation in direct speech they appear in a shortened form with a reduced final vowel (2.1.5.3), for example: *guŋ-ki-n* (< *guŋ-ki-ni*) 'he said' <say-PAST-3SG>. These phonetic changes are not reflected in the examples presented below.

18.4.1. Direct speech introduced with evidential particles

All the verbs listed in 18.4.1 with the exception of the verb *gun-* 'say' require that the evidential particle *gumu* or *gune* follow the quotation in direct speech, for example:

(1370) a.   *Nua-ni*   *diaŋ-ka*   *eniŋe-tigi:*
          he-3SG   say-PERF   mother-LAT.REF
          magazina-tigi   *ŋene-zeŋe-i*   *gumu.*
          [shop-LAT   go-FUT-1SG   EV]
          'He told his mother: I will go to the shop.'

     b.   *Bi* *abuga-i*   *diana:-ni*   *in'ei*
          me father-1SG   say.PAST-3SG   [dog
          e-zi   *sunzu* *gumu.*
          NEG-IMP.2SG   tease   EV]
          'My father was saying: Don't tease the dog.'

     c.   *Ei* *ma:ma*   *j'eu*   *digaŋ-ka*   *tuxi-we*
          this grandmother   what   say-PERF   [sledge-ACC
          xebu-je   *gumu,* *ni-de*   *anči*   *gumu.*
          take-IMP.2SG   EV]   who-IND   no   EV
          'This grandmother said: Bring the sledge, (but) there was nobody there.' (K 109)

     d.   *Si* *xaundasi-je*   *Iwana* *mäunda-ni*   *j'e-we*
          you ask-IMP.2SG   [Ivan   gun-3SG   what-ACC
          gumu.
          EV]
          'Ask (him): Is it Ivan's gun or somebody else's?'

The evidential particle may be absent in a very long direct speech quotation, or in a dialogue when verbs of saying introduce the direct speech of several speakers alternately.

18.4.2. The verb *gun-* 'say'

The verb *gun-* sometimes repeats another verb of saying already present in the sentence. Thus, in (1371) the direct speech is introduced and preceded by the verb *dian-* 'say', however, the verb *gun-* follows the quotation. Its morphological form "doubles" the form of the first verb of saying (the 1st person Singular in this case).

(1371) *Bi*   *dian-a-i*   *bi-s'e-i*   *sin-tigi*
       me   say-0-PRP   be-PERF-1SG   you-LAT
      e-zi   *ŋene*   *guŋ-ki-mi.*
      [NEG-IMP.2SG   go]   say-PAST-1SG
      'I told you: Don't go.

Alternatively, the verb *gun-* can act as the only means to introduce direct speech, in which case it always follows the quotation. The subject of the superordinate clause that introduces the direct speech may precede the quotation, as in (1373).

(1372) a. *Sebe*   *beje-ti*   *taŋa:-ti*   *jei*   *ni:*
          earlier   he-3PL   count.PAST-3PL   [nine   man
          bi-fi   *guŋ-ki-ni.*
          be-1PL.IN]   say-PAST-3SG
          'Earlier they were counting themselves and said: There are nine of us.' (K 30)
     b. *Digan-ta-i-ze*   *tuxi-we*
          [[say-PERM-2SG-HORT   [sledge-ACC
          xebu-je   *guŋ-ke*   *gun-te-j-ze*
          take-IMP.2SG s   ay-PERF]   say-PERM-2SG-HORT]]
          guŋ-ki-ni.
          say-PAST-3SG
          'She said: tell (them) that I told (you): Take the sledge.' (K 109)

(1373) a. *Exi-ni*   *mo-lo-zo-m(i)*   *mo-lo-zo-m(i)*
          sister-3SG   [tree-V-SUBJ-1SG   tree-V-SUBJ-1SG
          bi   *mo-lo-zo-m(i)*   *guŋ-ki-ni.*
          me tree-V-SUBJ-1SG]   say-PAST-3SG
          'Her sister said: I shall, I shall, I shall cut trees.' (K 104)
     b. *Belie*   *iŋke*   *guŋ-ki-ni.*
          fairy   [OK]   say-PAST-3SG
          'The fairy said: OK.' (K 160)

18.4.3. Ellipsis of the verb of saying

The verb of saying may be entirely absent from the sentence with direct speech, while the other verb within the matrix clause takes a non-finite form (the Infinitive in (1374) and the Past Participle in (1375)). Since these forms do not normally function as an independent predicate, this indicates that we are in fact dealing here with an incomplete structure: the finite verb of saying is omitted.

(1374) a.   *Eme-gi-mie,*   *e:*   *eniŋe, aziga-ziga*
             come-REP-INF   [INTER   mother girl-PL
             i:-le   *bi:-ni?*
             this-LOC   be-3SG]
             'Having come (he said): Mother, where are the girls?' (K 106)

     b.   *Ise-si-gi-e-ni,*   *omo*   *Kanda*   *mafa*
             see-IM-REP-PAST-3SG   one   Kanda   old.man
             mamaka-ŋi: *mule*   *bi-mi*
             wife-AL.REF   with   be-INF
             aŋa-si-e.
             [night.shelter-V-IMP.2SG]
             'He can see that the old man Kanda lives with his wife (and says): Stay for the night.'

(1375) *Omo-so*   *emende*   *te:n-zi*   *egdeŋe*
       one-ADJ   witch   sit.PP-INST.SS   [interesting
       ni:-xi-de   *bi-ze-ni.*
       man-ADJ-FOC   be-SUBJ-3SG]
       'One witch (said while) sitting: It is interesting, there are people.'
       (K 181)

18.4.4. The Imperative in direct speech

In sentences that involve the Imperative in direct speech, the addressee of the imperative utterance may be optionally expressed within the superordinate clause as the Accusative object. Such sentences therefore form object control structures, where the direct object is coreferential with the subject of the subordinate clause. Examples are:

(1376) a.   *Bi*   *od'o-i*   *niŋka-wa*   *buolime-we*
             me   grandfather-1SG   Chinese-ACC   [corn-ACC
             we-je   *guŋ-ki-ni.*
             grow-IMP.2SG]   say-PAST-3SG
             'My grandfather told the Chinese people: Grow corn!'

     b.   *Bi*   *eniŋe-we*   *xutinde:-mi*   *ule:-we*
             me   mother-ACC   shout.PAST-1SG   [meat-ACC
             olokto-jo   *gumu*   (*guŋ-ki-mi*).
             cook-IMP.2SG   EV   (say-PAST-1SG)]
             'I shouted to my mother: Cook some meat!'

c.   *Bi   men-e*   *xunazi:*   *dian-a-mi*
     me   REF-0   sister.REF   say-0-1SG
     ule:-we   *olokto-jo.*
     [meat-ACC   cook-IMP.2SG]
     'I said to my sister: Cook some meat.'

d.   *A:nta*   *nua-ma-ni*   *dian-ka*   *uli-we*
     woman   he-ACC-3SG   say-PERF   [water-ACC
     gazi-e   *gumu*   (or: *gun-ki-ni*).
     bring-IMP.2SG   EV   (say-PAST-3SG)]
     'The woman told him: Bring some water.'

e.   *Bi   ag'a-i*   *min-e-we*   *digan-a-ini*
     me   brother-1SG   me-0-ACC   say-0-3SG
     zugdi-tigi   ŋene-je.
     [house-LAT   go-IMP.2SG]
     'My brother says to me: Go home.'

f.   *Bi   men-e*   *sita-i*   *kaja:-mi*
     me   REF-0   son-REF   order.PAST-1SG
     Iwana-wa   *cemne-je*   *gumu.*
     [Ivan-ACC   deceive-IMP.2SG   EV]
     'I ordered my son: Don't tell Ivan the truth!'

Chapter 19
Relative clause

Relative clauses are expressed with different types of participles that determine the relativized noun: the Active (7.6.1.1), Passive (7.6.1.2), Destinative (7.6.1.3), and Resultative (7.6.1.4) participles. The semantic relation between the head and the active participle can be of a very wide character, since this participle is not oriented semantically to refer to any particular participant (see 7.10.1.1). Different syntactic positions can be relativized by means of the active participle: Nominative (1377a), Accusative (1377b), Locative (1377c), Instrumental (1377d), Dative (1377e), the time adverb (1377f), and, more seldom, the possessor (1377g).

(1377) a. *Ni:*   *su:le-i-we-ni-de*   *ja-u-mi.*
        [man   be.ill-PRP-ACC-3SG-FOC]   medicine-CAUS-1SG
        'I cure the people who are ill.'

     b. *Bi*   *od'o-i*   *zugdi-we*
        [me   grandfather-1SG   house-ACC
        wo:n-di-ni   *bi*   *bagdi-mi.*
        make.PP-DAT-3SG]   me   live-1SG
        'I live in the house which my grandfather built.'

     c. *Bi anda-i*   *xoton-tigi*   *ŋene-ini*   *bi*
        me friend-1SG   city-LAT   go-3SG   [me
        ag'a-i   *xoton-du*   *bagdi:-le-ni.*
        brother-1SG city-DAT   live.PRP-LOC-3SG]
        'My friend goes to the city where my brother lives.'

     d. *Bi in'ei-we*   *gazi-e-mi*   *bi*
        me dog-ACC   take-PAST-1SG   [me
        sita-i   *ŋele-i-we-ni.*
        son-1SG   be.afraid-PRP-ACC-3SG]
        'I took away the dog of which my son is frightened.'

     e. *Bi si*   *suese-we*   *bu-o:-i*   *ni:-we*
        [me you   axe-ACC   give-PP-2SG]   man-ACC
        ise:-mi.
        see.PAST-1SG
        'I saw the man to whom you gave the axe.'

f.   *Bi   abuga-i*   *kuti-we*   *wa:-i-ni*
     [me father-1SG   tiger-ACC   kill-PRP-3SG]
     neŋi-ni   *bagdi-e-mi.*
     day-3SG   born-PAST-1SG
     'I was born on the day when my father killed the tiger.'

g.   *Si   a:nta*   *neŋu-me-ni*
     you [woman   younger.sibling-ACC-3SG
     wa:n-tigi-ti   *ŋene:-i.*
     kill.PP-LAT-3PL]   go.PAST-2SG
     'You went to the woman whose brother was killed.'

Almost every element of the superordinate clause, therefore, can be relativized with the help of the active participle. It does not seem possible to relativize the adverbial syntactic positions expressed by a postpositional phrase and the standard of comparison. Examples of relativization into a subordinate clause are missing and we will assume that even if they are theoretically possible, they are extremely unusual in Udihe.

The Passive, Resultative, and Destinative Participles are inherently oriented to express a particular participant of the situation – a patient/theme (passive participle, but see exceptions in   experiencer of the resultative situation (Resultative Participle), or an object destined for action (Destinative Participles). Therefore in relative clauses with these types of participles only these particular roles are relativized.

There are three major types of relative clause – external, internal, and discontinuous, described in sections 19.1, 19.2, and 19.3, respectively. They use different formal strategies with respect to the position of the participle and in marking the syntactic role of the relativized noun. The external relative clause is prenominal and uses the so-called gapping strategy, that is, the grammatical role of the relativized noun is not overtly indicated within the relative clause but corresponds to the syntactic gap. In the internal relative clause the participle is postnominal and corresponds to the syntactic head of the relative clause, while a relativized noun is internal to the relative. In the discontinuous clause the relativized noun and the relative clause are not adjacent to each other. There are no syntactic and/or semantic restrictions on forming external and internal types of relative clause; both strategies apply to all grammatical relations accessible to relativization. The discontinuous clause is a marginal type, which allows only the subject and the direct object to relativize. Within each strategy there are additional formal differences between the cases in which the head noun corresponds to the subject of the relative clause, and in which the head noun does not coincide with the subject of the relative clause.

From the communicative point of view, internal and discontinuous relative clauses seem to involve the topicalization of the relativized noun (on the notion of topic and topicalization of other sentence elements see Chapter 24). In fact, they are structurally similar to other postnominal modifiers available when the head

noun is topicalized (24.2.1). Semantically, it appears that only internal and discontinuous relative clauses may be non-restrictive, while a restrictive interpretation is possible for all three types.

The word order within the relative clause may vary, but its predicate always occupies the last linear position, while its subject (if different from the head noun) must be clause-initial within the external relative. However, this is not necessarily so within the internal relative clause.

The structure of this chapter is based on a formal classification of relative clauses. Apart from the three major types mentioned above, it also describes the copular relative clause (19.4), the headless relative clause (19.5), and depictives (19.6).

19.1. External strategy

In external relative clauses the predication is mostly expressed with active participles, Destinative Participles, and Resultative Participles. Passive participles, although possible, are very rarely used in this type for an obvious pragmatic reason. Normally passive participles occur only if the head noun with the semantic role of the patient in the relative clause has a more topicalized status than the agent. Therefore in a relative clause with passive participles the head noun (patient) should be highly topical, and the internal (topicalizing) relative clause strategy (19.2) is mostly used.

The most important formal features of the external strategy are the prenominal position of the participle and gapping of the relativized noun within the relative clause.

19.1.1. Relativized subject

To relativize a subject with the external strategy, that is, when the head noun coincides with the subject of the relative clause, only impersonal forms of participles are used. Plurality may be marked with the collective word *getu* following the participle. The head noun follows the relative clause. The subject is absent (gapped) from the relative clause.

If the relativized noun also corresponds to the grammatical relation of the subject of the superordinate clause, it takes a Nominative form.

(1378) a.   *Ei*   *kusige-we*   *min-du*   *suŋgele:*   *ni:*
            [this   knife-ACC   me-DAT   give.PP]   man
            ŋene:-ni.
            leave.PAST-3SG
            'The man who gave me this knife left.'

b. *Buni:*   *käŋa*   *bu*   *zulieli-u*   *ili:-ni.*
[bellow.PRP]   deer   we   front-1PL.EX   stand-3SG
'The bellowing deer is standing in front of us.'

c. *Songo-i*   *getu*   *ñ'aula*   *susa:-ti.*
[cry-PRP   PL]   child   escape.PAST-3PL
'The crying children escaped.'

The following example demonstrates number agreement between the head and the relative clause:

(1379) *Inixi*   *osi-gi-e*   *getu*   *čawa-ziga*   *amäixi*
[alive   become-REP-PP   PL]   soldier-PL   backwards
susa-gi-li-e-ti.
escape-REP-INC-PAST-3PL
'The soldiers who remained alive ran back.' (SKX 270)

When the syntactic role of the head in the superordinate clause is different from the subject, it is marked by case suffixes or postpositions.

(1380) a. *Tiŋeni*   *eme-i*   *getu*   *ni:-we*
[yesterday   come-PRP   PL]   man-ACC
ise:-mi.
see.PAST-1SG
'I saw the people who came yesterday.'

b. *Bi*   *bagdi-mi*   *sin-zi*   *geje.*
me   live-1SG   [you-INST   together
etete-i   *ni:-du*
work-PRP]   man-DAT
'I stay with the man who works with you.'

c. *Songo-i*   *getu*   *ñ'aula-zi*   *ŋele-mi.*
[cry-PRP   PL]   child-INST   afraid-1SG
'I am afraid of crying children.'

d. *Min-du*   *kusige-we*   *bu-o:*   *ni:-we*
[me-DAT   knife-ACC   give-PP]   man-ACC
anana   *e-s'e-i*   *ise.*
long.ago   NEG-PERF-1SG   see
'I haven't seen the man who gave me the knife for a long time.'

The same pattern is used with the Destinative (1381) and Resultative (1382) participles (passive participles are not possible in this type). In both cases the head noun acts as a subject of the relative clause, although semantically it has the role of experiencer.

(1381) a.   *Bi   ise:-mi   mo:-wo   juosi-kči   suese-we.*
            me   see.PAST-1SG   [tree-ACC   cut-DP]   axe-AC
            'I saw the axe for cutting trees.'

       b.   *Bu-je   min-du   in'ei-we   egbesi-kči*
            give-IMP.2SG   me-DAT   [dog-ACC   tie-DP]
            xeku-we.
            rope-ACC
            'Give me a rope to tie the dog.'

(1382) a.   *Cambi-ktu   moxo-zi   e-zi   umi.*
            [break-RES]   mug-INST   NEG-IMP.2SG   drink
            'Don't drink from the broken mug.'

       b.   *Bi   sieni-ktu   kuti-we   ise:-mi.*
            me   [wound-RES]   tiger-ACC   see.PAST-1SG
            'I saw a wounded tiger.'

       c.   *Bi   deu-ktu   ni:-we   ise:-mi.*
            me   [get.tired-RES]   man-ACC   see.PAST-1SG
            'I saw the tired man.'

19.1.2. Other positions relativized

If the syntactic role of the head in the relative clause is other than the subject, within the relative clause there is a syntactic subject position. The subject of the relative clause takes the Nominative form. The participle is used in its personal form; the personal inflections refer to the person and number of the subject of the relative clause. The head noun corresponds to the syntactic gap within the relative clause.

19.1.2.1. Same-subject and different-subject sentences

Different-subject forms indicate that the subjects of the two clauses are not identical (1383). Same-subject participial forms express coreference of the relative clause subject with the subject of the superordinate clause (1384).

(1383) a.   *Bu   sa-u   su   bagdi-e-u   zugdi-we.*
            we   know-1PL.EX   [you   live-PP-2PL]   house-ACC
            'We know the house where you lived.'

       b.   *Si   b'a-i   siekte   nemnes'e-ndime.*
            [you   find.PP-2SG]   thread   narrow-ADJ
            'The thread which you found is narrower.'

    c.   *Bi   bu-o:-mi*   *zä:-ŋi-we-i*   *minti*

          me give-PP-1SG   money-AL-ACC-1SG   [we

          aŋa-si-e-fi   *ni:-du.*

          night.shelter-V-PP-1PL.IN]   man-DAT

          'I gave money to the man with whom we stayed.'

    d.   *Bi   nakta-wa*   *kusige-si-e-mi*   *bi*

          me boar-ACC   knife-V-PAST-1SG   [me

          od'o-i   *anana*   *wakca:-ni*   *kusige-zi.*

          grandfather-1SG   long.ago   hunt.PP-3SG]   knife-INST

          'I stabbed the boar with the knife with which my grandfather used to hunt.'

(1384) a.   *Nua-ni*   *umi-e-ni*   *men-e*   *gada:-mi*

          he-3SG   drink-PAST-3SG   [REF-0   buy.PP-SS]

          'ai-we.

          vodka-ACC

          'He drank the vodka which he bought.'

     b   *Nua-ti*   *eme-gi-e-ti*   *anana*

          he-3PL   come-REP-PAST-3PL   [long.ago

          gdi-e-fi   *zugdi-le.*

          ve-PP-SS.PL]   house

          'They came to the house where they used to live.'

19.1.2.2. Impersonal and passive relative clauses

The following example illustrates the agentless relative clause used to de-emphasize the subject. As in finite agentless constructions (see 16.2.5), the lexical subject of the relative clause is absent and the 3rd person plural different-subject inflection on the participle form is used.

(1385) *Tiŋeni*   *oňo-u-ŋ-ki-ti*   *oňo-wo*   *eineŋi*

       [yesterday   write-PAS-CAUS-PP-3PL]   letter-ACC   today

       bi   *b'a-mi.*

       me   get.PAST-1SG

       'Today I got the letter written yesterday.'

A similar meaning is rendered by the relative clause with the passive participle where the head noun corresponds to the patient/theme argument. The subject is absent on the surface.

(1386) a.   *Tugbu-se*   *mo:-lo*   *te:-mi.*

          [cut.down-PP.PAS]   tree-LOC   sit.PAST-1SG

          'I was sitting on the cut down tree.'

b. *E-u*   *tagda*   *aziga*   *eme:-ni.*
NEG-PAS   recognize   girl   come.PAST-3SG
'An unknown girl came.'

19.1.2.3. Relativized possessor

Possessor relativization is a very rare option. When the possessor is relativized, it takes the Nominative form and precedes the impersonal form of the participle. The head of the possessive construction is located after the participle and takes the 3rd person inflection normally used in possessive constructions (13.1). It can also have the suffix marking the role of the possessor in the superordinate clause such as the Accusative marker in example (1387).

(1387) *Bi* *a:nta*   *gada-i*   *zugdi-we-ni*
me woman   [buy-PRP   house-ACC-3SG]
b'agdi-e-mi.
meet-PAST-1SG
'I met the woman whose house you bought.'

19.1.3. Destinative Participles with the Past meaning

As mentioned in 7.10.1.3.2, Destinative Participles may occasionally have a Past meaning. It should be noticed that in Schneider's description (Schneider 1936: 122) the Participles in *-kči* are treated as a regular subtype of the active Past Participles without any reference to their destinative meaning. Unfortunately, examples of their usage as active Past Participles are not given. Participles with the suffix *-kči* may behave as a regular Past active participles in the modern Bikin dialect as well. However, in most cases in our material, participles with the suffix *-kči* are definitely Destinative in different syntactic functions. Their use as active Past Participles without a destinative meaning is restricted to the few cases cited below and seems to be obsolete.

    In the impersonal form such participles modify a head noun that corresponds to the subject role (1388). Personal forms are employed otherwise (1389).

(1388) a. *Zugzä:-wa* *zomi-kči*   *jandasi c'o*   *egdi*   *kei-we*
            [fish-ACC   steal-DP]   badger very   many   word-ACC
            dian-a-ini.
            say-0-3SG
            'The badger who stole the fish says many words.' (K 149)

b.   *Ei   bi   ule:-ŋi-we-i   zomo-si-kči-ziga*
     this [me   meat-AL-ACC-1SG   steal-IM-DP-PL]
     kil'ai-ziga.
     seagull-PL.
     'These are the seagulls who used to steal my meat.' (K 184)

c.   *Nua-ni   min-du   zube   neŋi-ni   bi-kči*
     he-3SG   [me-DAT   two   day-3SG   be-DP]
     ŋeni-ge.
     go-PERF
     'He left, having stayed with me for two days.'

(1389) a.   *Ei   bi   mafa-i   suŋgele-kči-ni   xua.*
            this [me   husband-1SG   give-DP-3SG]   flower
            'These are the flowers given by my husband.'

       b.   *Ei   ta:mati   Petro   bu-kči-ni   kusige.*
            this [last.year   Peter   give-DP-3SG]   knife
            'This is the knife which Peter gave (me) last year.'

       c.   *Iwana   gazi-kči-ni   suala   ge: m'ei.*
            [Ivan   give-DP-3SG]   ski   bad   only
            'The skis given by Ivan are bad.'

Details about this type are not clear. The possibility always exists of using the
active Past Participle in the same sentence, cf. (1390). It seems, however, that
(1390) does not express the focusing of the subject, as distinct from (1389a).

(1390) *Ei   bi   mafa-i   suŋgele:-ni   xua.*
       this [me husband-1SG   give.PAST-3SG]   flower
       'These are the flowers given by my husband.

19.1.4. External relative clauses with case agreement

Attributive agreement in case is otherwise absent in Udihe, but with some
exceptions, as in 13.3.6. Case agreement within an external relative clause is
vary rare. It is only possible in the Accusative.

(1391) a.   *Ni:-we   wa:-ma-ni   mafa-wa   e-iti*
            [man-ACC   kill.PP-ACC-3SG]   bear-ACC   NEG-3PL
            amä:sa-wan-a.
            leave-CAUS-0
            'They didn't leave the bear that had killed a man.' (SK 292

b. *Bi   ise:-mi*   *ei   suŋta*
    me   see.PAST-1SG   [NEG   deep
    bi:-we-ni   *siŋe-we.*
    be.PRP-ACC-3SG]   well-ACC
    'I saw a well which is not deep.'

c. *Ge, ei   bua   diga:-ma-ni*   *xa-ma-ni*
    well this   God   eat.PP-ACC-3SG   remainder-ACC-3SG
    ni-du   bu-zeŋe-fi?
    who-DAT   give-FUT-1PL.IN
    'Well, to whom shall we give the remainders of what the God has
    eaten?' (SKX 264)

19.2. Internal strategy

In this type of relative clause the subordinate participle follows the relativized
noun and is immediately adjacent to it. The relativized noun tends to be located at
the beginning of the superordinate clause, often (but not exclusively) in the
clause-initial position and is likely to be topicalized. If it is not clause-initial, the
subject of the superordinate clause may precede it.

   This strategy provides examples of the so-called "internal" relative clause
(Keenan 1985); the relativized noun is internal to the relative clause and does not
constitute its syntactic head. Sentence (1392b) exemplifies the external (gapped)
relative clause and (1392c) illustrates the internal relative clause. The gap is
shown by the symbol Ø. In (1392c) the relativized noun occupies the same
syntactic position as in the initial sentence (1392a), namely, is direct object
encoded by the Accusative. Note that the relativized noun in (1392c) does not
control number agreement into the superordinate clause, as does the head noun in
(1392b).

(1392) a. *Bi   od'o-i*   *zugdi-ziga-we*   *wo:-ni.*
           me   grandfather   house-PL-ACC   make.PAST-3SG
           'My grandfather built houses.'

     b. *Bi   od'o-i*   *wo:-ni*   *zugdi-ziga*
         [me grandfather Ø   make.PP-3SG]   house-PL
         uligdig'a-ŋku.
         beautiful-PL
         'The houses built by my grandfather are beautiful.'

     c. *Bi   od'o-i*   *zugdi-ziga-wa*
         [me grandfather-1SG   house-PL-ACC
         wo:-ni   *uligdig'a.*
         make.PP-3SG]   beautiful

'The houses built by my grandfather are beautiful'
or: 'As for the houses built by my grandfather, they are beautiful.'

The participle bears case markers that show the syntactic role of the relativized noun within the matrix clause. In different-subject sentences it is also marked for the Possessive which cross-references the relative clause subject.

The relativized noun must immediately precede the participle, while all secondary elements within the internal relative clause precede the relativized noun and typically the embedded subject as well:

(1393) a. *Ei   timani   si   kniga xebu-o:-me-i*
           [this   morning   you   book   bring-PP-ACC-2SG]
           Tolia   taŋi-ge.
           Tolja   read-PERF
           'Tolja has (already) read this book you brought in the morning.'

       b. *E:xi-ni   zali   düixi-ni   käŋa   sulikta-ni*
           sister-3SG   [barn   inside-3SG   deer   intestine-3SG
           bi-si-me-ni   gazi-si-e-ni.
           be-PP-ACC-3SG]   collect-IM-PAST-3SG
           'The sister collected the deer intestines which were in the barn.'
           (K 127)

19.2.1. Relativized subject

No Destinative or Resultative Participles are found in this type, with the exception of rare examples where the Destinative Participles function as the Past Participle (7.10.1.3.2).

(1394) *Bi   sita-i   jexe-kči   j'eu-ke   ŋene:-ni.*
        [me   son-1SG   sing-DP]   what-IND   go.PAST-3SG
        'My son went somewhere, singing.'

The same-subject sentences use impersonal participles. Plurality may be marked by the collective word *getu*, cf. (1396).

(1395) a. *Bi   ñansule-mi   metu-o: bolnica-le*
           [me study-INF   finish-PP]   hospital-LOC
           etete-zeŋe-i.
           work-FUT-1SG
           'Having finished my studies, I will work at a hospital.'

b. *Ei*   *b'ata*   *sagdi*   *ede:*   *wakca-i*
    [this   boy   big   become.PP]   hunt-PRP
    ni: *ede-zeŋe-ni.*
    man   become-FUT-3SG
    'This boy when he grows up will be a hunter.'

c. *Teu metu-o:*   *sama*   *uŋtu-we*
    [all finish-PAST]   shaman   tambourine-ACC
    sewe-si:-ni   *to:-lo.*
    spirit-V-3SG   fire-LOC
    'Having finished everything the shaman (beats) the tambourine and
    calls spirits before the fire.'

d. *B'ata sagbai*   *tukä-wasi-mi*   *zolo*
    [boy barefooted   run-DIV-INF]   [stone
    camna:-tigi-ni   *bugdi:*   *wa:-ni.*
    break.PP-LAT-3SG]   foot.REF   kill.PAST-3SG
    'The barefooted boy was running everywhere, and wounded his
    foot on a broken stone.'

(1396) a. *Ni:-ziga*   *ule:-we*   *xuene-i*   *getu*
           [man-PL   meat-ACC   cut-PRP   PL]
           kusige-we   *nodo:-ti.*
           knife-ACC   lose.PAST-3PL
           'The people who were cutting the meat lost the knife.'

      b. *Wac'a*   *esi-gi-e-ni*   *ni:*   *suala-ŋisi-mi*
          few   become-REP-PAST-3SG   [man   ski-V-INF
          ñoni: *getu.*
          can.PRP   PL]
          'Few people are left who can make skis.'

If the subjects of the superordinate and the relative clause are not coreferential but
the relativized noun is the subject of the relative clause, the personal participle
forms are used. The participle takes the 3rd personal suffix and the case suffix or
the postposition marking the syntactic role of the relativized noun in the
superordinate clause.

(1397) a. *Bi   mo:*   *zegde-i-le-ni*   *bi-si-mi.*
           me   [tree   burn-PRP-LOC-3SG]   be-PAST-1SG
           'I was in the burning forest.'

      b. *Moxo*   *camna:-ma-ni*   *aisi-gi-u-zeŋe.*
          [mug   break.PP-ACC-3SG]   mend-REP-PAS-FP
          'The broken mug should be mended.'

c. *Aziga   sebzeŋke   jexe-i-we-ni*   *teu*
    [girl   interesting   sing-PRP-ACC-3SG]   all
    aju-iti.
    like-3PL
    'Everybody likes the girl who sings nicely.'

d. *Bu   a:nta   ñoligi   seune-we*
    we   [woman   blue   kerchief-ACC
    seunele:n-zi-ti   dia-si-e-mu.
    put.on.PAST-INST-3PL]   say-IM-PAST-1PL.EXC
    'We were talking to the women who put on the blue kerchief.'

e. *A:nta   songo-i-we-ni*   *gazi-e-ni.*
    [woman   cry-PRP-ACC-3SG]   take-PAST-3SG
    'He took away the crying woman.' (Schneider 1936: 14)

f. *Omo   tukca   saŋa   culini   xetigeni:-we-ni*
    [one   hare   hole   through   jump.PRP-ACC-3SG]
    Kanda   mafa   ku'ai-ni   due-le-ni
    Kanda   old.man   ear-3SG   top-LOC-3SG
    pali-gde   ŋingada:-ni.
    black-FOC   grease.PAST-3SG
    'The old man Kanda greased the hare which jumped through the hole
    with black on its ears.'

g. *Aziga   ma:ma-i   uli:-ni*
    girl   [grandmother-REF   sew.PRP-3SG
    ca:-du-ni   gusi:-ni.
    behind-DAT-3SG]   play-3SG
    'The girl is playing behind the sewing grandmother.'

19.2.2. Other positions relativized

If the syntactic position relativized is other than the subject, the topicalized
relativized noun precedes the relative clause. It takes the case marker, showing its
syntactic role in the subordinate clause. The participle takes the case suffix which
marks the role of the head noun within the superordinate clause and the personal
inflection referring to the subject of the relative clause. Thus, the relativized noun
and the participle might not have the same case. The subject of the relative clause
usually precedes the relativized noun, as is demonstrated by most of the examples
cited in this section. However, it may also follow it, cf.:

(1398) a. *Oño-jo   ŋimaŋku-we   bi*
           write-IMP.2SG   [tale-ACC   me
           ŋima-si:-we-i.
           tell-IM.PRP-ACC-1SG]
           'Write down the tale that I am telling.'

b. *Gazi-je*   *oloxi-we*   *bi*   *tiŋeni*
take-IMP.2SG   [squirrel   me   yesterday
wa:-ma-i.
kill.PP-ACC-1SG]
'Take the squirrel that I killed yesterday.'

c. *Ei*   *tege-we*   *si*   *uli-e-i*
[this   gown-ACC   you   sew-PP-2SG]
musei-du   *bi:-ni.*
museum-DAT   be-3SG
'This gown that you made is in the museum.'

19.2.2.1. Same-subject and different-subject sentences

Examples (1399) demonstrate different-subject sentences, and examples (1400) same-subject sentences. Examples (1401) show the impersonal relative clause where the participle is marked for the 3rd person Plural.

(1399) a. *Bi* *nakta-wa*   *kusige-si-e-mi*   *bi*
me boar-ACC   knife-V-PAST-1SG   [me
od'o-i   *kusige-we*   *bu-o:n-zi-ni.*
grandfather-1SG   knife-ACC   give-PP-INST-3SG]
'I cut the boar with the knife my grandfather had given to me.'

b. *Si* *anda-i*   *ŋene:-ni*   *bi*
you freind-2SG   go.PAST-3SG   [me
ag'a-i   *xoton-du*   *bagdi:-tigi-ni.*
brother-1SG   city-LOC   live.PRP-LAT-3SG]
'Your friend went to the city where my brother lives.'

c. *Si*   *käŋa-wa*   *wa:-i*   *dili-we-ni*
[you   deer-ACC   kill-PRP.2SG] head-ACC-3SG
bi zawa:-mi.
me take.PAST-1SG
'I took the head of the deer you killed.'

d. *Ni:*   *käŋa* *enime-ni*   *wa-zaŋa-wa-ni*
man   [deer female-ACC-3SG   kill-FP-ACC-3SG]
igbesi-e-ni.
chase-PAST-3SG
'The man_i chased the female deer which he_j was going to kill.'
(Schneider 1936: 143)

e. *Ono*   *okto-si:-ti*   *kuliga* *ni:-we*
how   medicine-V-3PL   [snake man-ACC
ikteme-le-i-we-ni?
bite-SING-PRP-ACC-3SG]
'How do they treat a man bitten by a snake?'

(1400) a. *Belie-we*   *b'an-zi-fi*
           [fairy-ACC   meet.PP-INST-SS]
           aŋa-si-e:-ti.
           night.shelter-V-PAST-3PL
           'They spent the night with the fairy they met.' (Schneider 1936: 143)
      b. *Men-e*   *käŋa-i*   *wa:-mi*   *kä:-la-ni*
           [REF-0   deer-REF   kill.PP-SS   side-LOC-3SG]
           te-ini.
           sit-3SG
           'He is sitting near the deer he killed.'

(1401) a. *Xaluga-wa*   *ŋala-la-ni*   *xeke-he-me-ti*
           [hammer-ACC   hand-LOC-3SG   tie-PP-ACC-3PL]
           asukta-gi-he-ni   *Tuguma.*
           untie-REP-PAST-3SG   Tuguma.
           'Tuguma untied the hammer tied to his (father's) hand.'
           (Schneider 1935a: 12)
      b. *Abdä:*   *mo:-wo*   *tugbule:-le-ti*
           leaf   [tree-ACC   cut.down.PP-LOC-3PL]
           tiŋmele:-ti.
           fall.PAST-3PL
           'The leaves were falling down on the cut tree.'

19.2.2.2. Relativized possessor

When the possessor is relativized it precedes the possessed noun which takes the 3rd person inflection, so this configuration does not differ from the regular possessive construction (13.1). In its turn the possessed noun is followed by the participle which has the case suffix showing the role of the relativized noun in the superordinate clause and the personal inflection referring to the subject of the relative clause. In (1402a) the possessed noun *emugde-ni* 'his stomach' corresponds to the subject of the relative clause, therefore it is not case-marked.

(1402) a. *Ñ'aula*   *emugde-ni*   *uni:-du-ni*   *eniŋe-ni*
           [child   stomach-3SG   hurt.PRP-LOC-3SG]   mother-3SG
           caja-wa   *bu-o:-ni.*
           tea-ACC   give-PAST-3SG
           'The mother gave some tea to the child whose stomach was hurting.'
      b. *Teŋku*   *bugdi-ni*   *camna:-ma-ni*
           [chair   leg-3SG   break.PP-ACC-3SG]
           wende-le-je.
           throw-SING-IMP.2SG
           'Throw away the chair whose legs are broken.'

If the syntactic role of the possessed noun in the relative clause is other than the subject, it is indicated by the case suffix on the possessed noun, for example, the Accusative suffix on *igi-we-ni* 'his tail' as in (1403a) or *neŋu-me-ni* 'her brother' in (1403b).

(1403) a. *In'ei*   *igi-we-ni*   *xua-nda:-ti*
            [dog   tail-ACC-3SG   cut-SEM-PP-3PL]
            eme-gi-e-ni.
            come-REP-PAST-3SG
            'The dog whose tail was cut off came.'

    b. *Si a:nta*   *neŋu-me-ni*
        you [woman   younger.sibling-ACC-3SG
        wa:n-tigi-ti   *ŋene-i.*
        kill.PP-LAT-3PL]   go-2SG
        'You are going to a woman whose brother was killed.'

19.2.2.3. Passive and Resultative relative clauses

Passive participles are often used within the internal strategy. The relative clause with the passive participle is always impersonal (that is, its subject is either indefinite or generic). The relativized noun in passive relative clauses is also its object and is marked for the Accusative. The role of the relativized noun within the superordinate clause is marked by the corresponding case suffix on the participle. The passive participles lack personal forms. The following examples illustrate the use of the Past passive participles (1404), the combined Passive-Resultative participle with a passive meaning (1405a), the ordinary Resultative Participle (1405b), and passive Necessitative participles (1406).

(1404) a. *Kusige-we*   *zu:-se-zi*   *ule:-we*
            [knife-ACC   sharpen-PP.PAS-INST]   meat-ACC
            di:-ni.
            cut-3SG
            'He is cutting the meat with the sharpened knife.'

    b. *Mo:-wo*   *tugbu-se-le*   *te:-mi.*
        [tree-ACC   fell-PP.PAS-LOC]   sit-1SG
        'I was sitting on the fallen tree.'

    c. *Ei bi*   *xebu-si-mi*   *gampa-wa*
        this me   bring-IM-1SG   [porridge-ACC
        olokto-so-wo.
        cook-PP.PAS-ACC]
        'Now I bring the cooked porridge.'

    d.   *Mo:*   *mo-lo-so*   *kä:-di-ni*   *egdi*
        [tree   tree-V-PP.PAS]   side-DAT-3SG   much
        bie.
        be.PRES.HAB
        'There is a lot of cut wood next to him.'

(1405) a.   *Bi*   *te:-mi*   *wopti-we*   *kimpi-ktu-se*
        me   sit-1SG   [door-ACC   close-RES-PP.PAS
        ca:-du-ni.
        behind-DAT-3SG]
        'I am sitting near the closed door.'
    b.   *Bi*   *b'a-gi-e-mi*   *kusige-we*   *campi-ktu-we.*
        me   find-REP-PAST-1SG   [knife-ACC   break-RES-ACC]
        'I found a broken knife.'

(1406) a.   *Oño-wo*   *oño-u-zeŋe*   *o-du*
        [letter-ACC   write-PAS-FP]   this-DAT
        bi:-zeŋe-ni.
        be-FUT-3SG
        'The letter which should be written will be here.'
    b.   *Bi*   *sita-i*   *saŋxua-i*   *diga-u-zeŋe-we*
        me   son-1SG   [lunch-REF   eat-PAS-FP-ACC]
        teu *mal'a*   *timadule.*
        all   consume.PERF   morning
        'My son ate in the morning all the lunch which had to be eaten.'

19.2.3. Internal relative clauses with case-agreement

In certain fairly rare cases the relativized nominal and the participle may be marked with the same case (always the Accusative). Case agreement in internal relative clauses is more frequent than in external relative clauses, especially in the Northern dialect. In principle, it may be analyzed either as an instance of "real" agreement (1407), or as a kind of apposition (1408). In the latter case the head nominal is extracted out of the relative clause and is typically separated from it by a pause and an intonation break.

(1407) a.   *Su:-we*   *su:-ne-i-we-ni*   *tokö*
        [sun-ACC   son-V-PRP-ACC-3SG]   cloud
        dakpi-e-ni.
        cover-PAST-3SG
        'The cloud covered the shining sun.'

b. *Zu:*   *mafa*   *sita-wa-ni*
  [two   bear   child-ACC-3SG
  eme-i-we-ti   *b'a-ni.*
  come-PRP-ACC-3PL]   get.PAST-3SG
  'He met two coming bear cubs.' (SKX 82)

(1408) a. *Ni:we*   *jagdugu-xi*   *bi:-we-ni*
      [man-ACC}   [spectacles-ADJ   be.PRP-ACC-3SG]
      ise:-mi.
      see.PAST-1SG
      'I saw a man, a bespectacled one.'

19.3. Discontinuous relative clauses

The relative clause can be separated from its head by other lexical material. In this case the relative clause is normally either postposed after the finite verb or fronted to the beginning of the sentence. It seems that the non-adjacent relative clause is triggered by a kind of "topic-promotion" of the head noun and appears under the same conditions as other discontinuous modifiers (24.2.1.2). Semantically, it is likely to be non-restrictive. Like the other discontinuous modifiers, the participle within the discontinuous relative clause agrees with the head noun in case. This is the general requirement for discontinuous constituents in Udihe. The syntactic constraint on the discontinuous relative clause is that the head noun must correspond to the subject or the direct object role within the superordinate clause; other grammatical relations do not trigger the non-adjacent relative clause.

19.3.1. Relativized subject

Example (1409) below illustrates the same-subject sentence with the relative clause non-adjacent to the head noun *sagdinta* 'old men', but postposed after the finite verb. The participle takes the impersonal form since the subjects of the two clauses are coreferential.

(1409) a. *Sagdinta*   *wac'a* *esigi-e-ni*   *anana*
      old.man   few   become-PAST-3SG   [long.ago
      bagdi-e-me-ti   *sa-i*   *getu.*
      live-PP-ACC-3PL   know-PRP   PL]
      'There are few old men left who know how the people lived before.'

> b.   *Učitelnica*   *eme-gi-e-ni*   *Jara-du*
>   female.teacher   come-REP-PAST-3SG   [Yar-DAT
>   *bi:*   *getu.*
>   be.PRP   PL]
>   'There came the teacher who lives (with her family) in Yar.'

In (1410) the subjects are not coreferential and the participle bears personal affixes that refer to the subject of the relative clause. The participle and the head nominal agree in case. The case affix shows the syntactic role of the head nominal within the matrix clause.

> (1410) a.   *Zakpu-ma*   *b'a-gi-e-ni*
>   eight-ACC   get-REP-PAST-3SG
>   *zegde:-me-ti.*
>   [scorch.PAST-ACC-3PL]
>   'He got eight scorched (animals).' (K 150)
>
>   b.   *Bi   nua-ma-ni*   *ise-si-e-mi*   *Jara-du*
>   be   he-ACC-3SG   see-IM-PAST-1SG   [Yar-DAT
>   *bagdi:-we-ni.*
>   live.PP-ACC-3SG]
>   'I saw him living (when) he was living in Yar.'
>
>   c.   *Bi   kuti   ña:-la-ni*   *te:-mi Iwana wa:-ni.*
>   me   tiger   skin-LOC-3SG   sit-1SG [Ivan   kill.PP-3SG]
>   'I am sitting on the skin of the tiger killed by Ivan.'

Some examples are also found where the personal affix on the participle is missing even in the case of a different subject.

> (1411) a.   *Bi   käu   wa:-mi*   *uti*   *getu-we*
>   me   all   kill.PAST-1SG   that   PL-ACC
>   *sun-e-we*   *wa:-ma.*
>   [you-0-ACC   kill.PP-ACC]
>   'I killed all of those who killed you.' (K 178)
>
>   b.   *Mun-e-we-de*   *a-ta-i*   *mute*
>   we-0-ACC-FOC   NEG-SUBJ-2SG   finish
>   *nada-sa*   *namu   tagäla-ni*   *bagdi:-we.*
>   [seven-ADJ   sea   behind-3SG   live.PRP-ACC]
>   'You won't catch us, who live behind the seventh sea.' (K 180)

19.3.2. Other positions relativized

Examples of a direct object relativized with the discontinuous strategy are (1412).

(1412) a. *Si   kusige-i   b'a-gi-e-i*
            you   knife-2SG   find-REP-PAST-2SG
            galakta-gi-e:-mi?
            [search-REP-PP-SS]
            'Did you find the knife you were looking for?'
        b. *Utemi   soŋo   ule:-we-ni   e-iti*
            therefore   bear   meat-ACC-3SG   NEG-3PL
            diga   xunaẓi näẓakta-i   wa-ma-ni.
            eat   sister [brother-REF   kill.PP-ACC-3SG]
            'That is why sisters do not eat meat of the bear killed by their brother.'
        c. *Bi   ila   tieẓe-we   bu-si-e-mi   ni:*
            me   three   money-ACC   give-IM-PAST-1SG   [man
            geli:-we-ti.
            ask.PRP-ACC-3PL]
            'I gave out the three rubles that the people asked for.'
        d. *Bi   kuti-we   ise:-mi   wakca-i*
            me   tiger   see.PAST-1SG   [hunt-PRP
            getu   sienisi-e-me-ni.
            PL   wound-PP-ACC-3SG]
            'I saw the tiger wounded by hunters.'
        e. *Min-e-we   bi   ic'a   bi-ŋe:-i*
            me-0-ACC   me   small   be-IC-1SG
            wondo:-mo-ti   *b'a-gi-e-ti*   *xoŋto*
            [throw.PP-ACC-3PL]   find-REP-PAST-3PL   other
            ni:.
            man
            'The other people found me abandoned when I was small.'

The following examples demonstrate some rare cases of adjunct relativization where the discontinuous strategy is employed.

(1413) a. *Xai elile-ni   e-si-ni   i:n-e*
            yet time-3SG   NEG-PAST-3SG   come-0
            bi kala-gi-ẓeŋe-i.
            me turn-REP-FUT-1SG
            'The time has not yet come when I turn again (into a man).'

b. *Eme-gi:-ni*   *kawa-tigi*   *bagdi:*   *ni:*
   come-REP-3SG   tent-LAT   [live.PRP   man
   bi:-tigi-ti.
   be.PRP-LAT-3PL]
   'He comes to the tent where people live.' (SKX 296)

c. *Men-e*   *bua-la-i*   *bagdi-ne-gi-e-ti*
   REF-0   place-LOC-SS   live-DIR-REP-PAST-3PL
   guasa   *nede:-fei*   *kä:-la-ni.*
   [bitch   put.PP-SS.PL]   side-LOC-3SG
   'They returned to live at their place, next to which they had put the bitch.' (SKX 212)

19.4. *Copular relative clauses*

Copular constructions as described in Chapter 17 also form relative clauses which basically follow the general patterns (19.1 and 19.2) for the relativized subject (the subject of the copular construction in this case). Such relative clauses have some kind of intensifying meaning; they stress the idea that the object denoted by the head noun is selected from a set of other similar objects. Both the regular participle of the copula *bi:-* and the Habitual participle *bie* are found in such relative clauses. Examples of external relative clauses with the copular construction are:

(1414) a. *Aja-da*   *toŋdo-do*   *bie*
   [good-FOC   straight-FOC be.PRP.HAB]
   daumi-we   *zoko:-ni.*
   bridge-ACC   put.PAST-3SG
   'He made a bridge which is good and straight.' (K 107)

b. *Ute*   *bi:*   *ni:-we*   *gen-e-mi.*
   [so   be.PRP]   man-ACC   fetch-0-1SG
   'I came to fetch a man of such kind.' (K 137)

c. *Omo-s'o*   *ni:*   *xebu-si:-ni*
   one-REST   man   carry-IM-3SG
   sina-du-i ...   *agbi*   *bi:*   *kusige-we.*
   burden.frame-DAT-REF   [wide be.PRP]   knife-ACC
   'One man was carrying a knife which is wide on his burden frame.' (SKX 326)

d. *Omo*   *a:nta* *eu-o:-ni,*   *sikele* *bi:*
   one   woman come.down.PAST-3SG [young be.PRP]
   a:nta   *eu-o:-ni.*
   woman   come.down-PAST-3SG
   'One woman came down, the woman who was younger came down.' (SKX 276)

The internal strategy is more frequent. The participle of the verb 'be' takes the 3rd person personal suffix referring to the head of the relative. For natural semantic reasons the head noun in this type of clause can be expressed only by a lexical noun, that is, is always in the 3rd person. As is usual in the internal relative clause, the participle might take the case suffix marking the semantic role of the head in the superordinate clause. Very seldom does the participle *bi:* lack a personal inflection in this type (1415b), similar to other postposed modifiers (24.2.1.2.3).

(1415) a. *Bi*   *ga:gi-e-mi*   *umac'a-i*   *xeku*
        me   pick.up-PAST-1SG   [short-FOC   rope
        bi:-we-ni.
        be.PRP-ACC-3SG]
        'I picked up the rope, which is short.'

    b. *Pakula*   *dia-si-e-ni*   *gabzi*   *ni:*
        Pakula   say-IM-PAST-3SG   [cheerful   man
        ei   *bie-zi.*
        NEG   be.PRP.HAB-INST]
        'Pakula was talking to a man who is not cheerful.'

    c. *Nic'a*   *sita*   *bi:-we-ni*   *emuge-le*
        [small   child   bi.PRP-ACC-3SG]   cradle
        u:-iti.
        tie.PAST-3PL
        'They use to tie down the children who were small to the cradle.'
        (SKX 286)

    d. *Bua*   *koli-ni* *teu-ni*   *ni:*   *bi:-ni*
        place   law   [all-3SG   man   be.PRP-3SG]
        koli-ni   *bua*   *xuen-di-ni.*
        law-3SG   place   surface-DAT-3SG
        'The law of the taiga is a law for ALL people in the forest.'
        (SKX 312)

19.5. Headless relative clauses

Headless relative clauses either have a specific meaning (19.5.1) or are non-specific generalized clauses (19.5.2).

19.5.1. Specific headless relative clauses

The participles functioning in headless relative clauses are inherently substantivized; however, there is no formal marker of substantivization. The participle itself takes the case suffix indicating the role of the hypothetical head nominal in the superordinate clause. They can refer to inanimate things.

(1416) a.   *Diga-u-zeŋe*   *bi-si-me-ni*   *diga:-ni.*
        [eat-PAS-FP]   be-PP-ACC-3SG   eat.PAST-3SG
        'He ate what had to be eaten.'

      b.   *Ñ'ädiga*   *wakca-i-zi-ni*   *t'aula-za-mi.*
        [Nadiga   hunt-PRP-INST-3SG]   use-SUBJ-1SG
        'I will perhaps use what Nadiga uses when hunting.' (Schneider 1936: 143)

      c.   *Zikte*   *dian-a-i-we-ti*   *tai-mi*
        [blueberry   say-0-PRP-ACC-3PL]   pick.up-INF
        bi-zeŋe-fi   *olondo-wo*   *gun-e-i-we-ti*
        be-FUT-1PL   [ginseng-ACC   call-0-PRP-ACC-3PL]
        olondo-mo-zoŋo-fi.
        ginseng-V-FUT-1PL
        'We will pick up what is called blueberry, we will collect what is called ginseng.'

      d.   *Zawa-ja*   *Wolodia*   *kopala-i-we-ni.*
        take-IMP.2SG   [Volodya   dig-PRP-ACC-3SG]
        'Take what Volodya is digging up (about potatoes).'

      e.   *Mafasa*   *alu-i-we-ni*   *uniŋa-wa*
        [old.man   serve-PRP-ACC-3SG]   spoon-ACC
        zawa-mi   *diga-mi*   *ča:la-ini.*
        take-INF   eat-INF   want-3SG
        'She took the spoon, ate what had been served by the old man, and agreed.'

      f.   *Ei*   *tege-we*   *ebie*   *uli-se-digi-de*
        this gown-ACC   [earlier   sew-PP.PAS-ABL-FOC]
        uligdig'a   *wo-zoŋo-i.*
        beautiful   make-FUT-1SG
        'I will make this gown even more beautiful than the one sewn earlier.'

The headless relative clause can refer to a human being without being formally different from the former type, so the exact reading must be understood from the context.

(1417) a.   *Ja:-la*   *anči*   *ede:-me-ni-de*
        [eye-PART   no   become.PP-ACC-3SG-FOC]
        igisi-mi.
        keep-1SG
        'I am keeping the one who lost his sight.'

b. *Bagdi:*   *getu*   *kese-lege-ti*   *sulikta*
[live.PRP   PL]   suffer-PURP-3PL   intestine
bede   *o:-zo.*
like   become-SUBJ
'Let it become like intestines so that people (living ones) suffer.'
(K 108)

c. *Bie*   *ei*   *getu*   *tu:-we*   *teu*
[be.PRP.HAB   this   PL]   shaman.pole-ACC   all
toktogi-e-mi.
cut.down-PAST-1SG
'I have cut down the shaman pole of the living (people).' (K 184)

The same structure is employed for headless relative clauses that refer to a place. In this grammar they are addressed in the chapter on adverbial clauses, see 21.2.

The same-subject clause is expressed with the impersonal forms of the participles. Plurality is regularly marked with the collective word *getu*, cf.:

(1418) a. *Bu dian-a:-mu*   *udie*   *kei-we-ni*
we speak-PAST-1PL   [Udihe language-ACC-3SG
egze-i   *getu-we.*
understand-PRP   PL-ACC]
'We were speaking to those who understood Udihe.'

b. *Bi ise:-mi*   *min-tigi*   *tukä-i*
me see.PAST-1SG   [me-LAT   run-PRP
getu-we.
PL-ACC]
'I saw (people) running to me.'

c. *Aja*   *wakca-mi*   *ñoni:*   *getu*   *soŋo-zi*
[good   hunt-INF   can.PRP   PL]   bear-INST
e-ini   *ŋele.*
NEG-3SG be.afraid
'Those who can hunt well are not afraid of the bear.'

Examples of the headless relative with Necessitative Participles (1419) and with passive participles (1420) are presented below.

(1419) a. *Bi nixe-u-zeŋe-i*   *egdi.*
me [do-PAS-FP-1SG]   many.
'I have a lot to do.'

b. *Nua-ni*   *etete-u-zeŋe-ni*   *wac'a.*
he-3SG   [work-PAS-FP-3SG]   little
'He has to do a little work.'

(1420) *Anana*   *bi-se-we*   *oŋmo-so.*
      long.ago   [be-PP.PAS-ACC]   forget-PP.PAS
      'The past is forgotten.'

19.5.2. Generalized headless relative clauses

The generalized relative clause may involve different formal types of predicate. On the finite generalized relative clause see 18.3.2.1. Participial non-finite generalized relative clauses are quite rare; one example is presented below.

(1421) *Ono*   *bi:-we-de*   *e-zi*   *galu.*
      [how   be.PRP-ACC-FOC]   NEG-IMP.2SG   hate
      'Don't hate her, whatever she is.' (K 166)

In (1422) we present examples of a non-finite generalized relative clause based on the Infinitive, in (1423a) one based on the Perfective converb, in (1423b) one based on the Past Participle, and in (1424) ones based on the Conditional Converb. As demonstrated by (1422a) the superordinate clause in this case can have a semantically redundant correlative word, in this case a universal quantifier *teu* 'all, everything'.

(1422) a. *Nua-ni*   *j'e-we-de*   *nixe-mi*
         [he-3SG   what-ACC-FOC   do-INF]
         teu   *ge:-zi*   *m'ei*   *nixe-ini.*
         everything   bad-INST   only   do-3SG
         'Whatever he was doing, he was only doing it badly.'
     b. *Ni-de*   *bi-mi*   *eme-je-u.*
         [who-IND   be-INF]   come.in-IMP-2PL
         'Whoever you are, come in.'

(1423) a. *Ni-de*   *eme-isi-ni*   *bi*   *mamasa-i*
         [who-IND   come-PC-3SG]   me   wife-1SG
         agda-ini.
         be.glad-3SG
         'Whoever comes, my wife is glad.'
     b. *I:-le*   *ŋene:-me-ni*   *si*   *d'ofo-ni-de.*
         what-LOC   go.PP-ACC-3SG   you   like-3SG-FOC
         'Wherever one goes, it is like you.'

(1424) a. *Siŋe*   *j'e-le-de*   *bi-li*   *saŋa-wa*
           rat   [what-LOC-IND   be-CC.SS]   hole-ACC
           o:-iti.
           make-3PL
           'Wherever they are, rats make holes.' (SK 353)
       b. *Ono-do*   *iŋeni*   *bi-lisi-ni*   *e-zi*   *te:-gi.*
           [how-IND   cold   be-CC-3SG]   NEG-IMP.2SG   stand-REP
           'However cold it may be, do not get up.'

19.5.3. Indefinite headless relative clauses

Headless relative clauses are used when the reference of a potential head is indefinite, in the sense 'unknown to the speaker.' Its plurality may be rendered by the 3rd person Plural subject agreement marker on the participle, as in (1425b).

(1425) a. *Eje-ne-mi*   *eje-ne-mi*   *ise:-ti*   *uli*
           float-DIS-INF   float-DIS-INF   see.PAST-3PL   [water
           kä:-la-ni   *p'a-sa*   *bi:-we-ni.*
           side-LOC-2SG   black-ADJ   be.PRP-ACC-3SG]
           'When they were floating down they saw something black on the
           riverbank.' (SKX 112)
       b. *ŋene-mi*   *ŋene-mi*   *unakta*   *meje-di-ni*
           go-INF   go-INF   river.strech   end-DAT-3SG
           belie-ziga   *ise:-ti*   *kiai*   *xo:n-dile-ni*
           fairy-PL   see.PAST-3PL [hill   surface-LOC-3SG
           bieuge   *kiug'e*   *ilana-i-we-ti.*
           shining   smooth   shine-PRP-ACC-3PL]
           'The fairies went further and on the stretch of the river they saw
           something shining and smooth on top of the hill.' (SKX 146)

19.6. Depictives

Copredicative adjectives and participles (depictives) modify a subject and a particular class of objects but cannot be associated with other grammatical relations. They may be of several types. Copredicative participles take the Nominative case, while copredicative adjectives mostly take the Instrumental (sometimes also the Nominative). As some of examples below illustrate, the depictive element does not need to be adjacent to the noun phrase that controls it.

On copredicative postpositional constructions see section 10.2.2.2.3.

19.6.1. Relative clauses as depictives

A passive or resultative relative clause that functions as a depictive is usually postnominal. A participial depictive can only be controlled by the subject.

A depictive with a resultative meaning describes the state which results from the previous action in which the participant that corresponds to the modified noun played a role of patient. Such a resultative may be expressed by the Past passive participle or the Resultative Participle. Example (1426a) illustrates the passive participle in the Nominative in such a function. For the Resultative Participle the Instrumental case is optional (1426b).

(1426) a.   *Ñ'aula*   *teu*   *butusige-se*   *eme-gi-e-ni.*
        boy   [all   soil-PP.PAS]   come-REP-PAST-3SG
        'The boy came home all soiled.'

      b.   *Nua-ni*   *teu*   *koŋko-ktu(-zi)*   *eme-gi-e-ni.*
        he-3SG   [all   beat-RES(-INST)]   come-REP-PAST-3SG
        'He came all beaten up.'

19.6.2. Adjectival depictives

19.6.2.1. Subject depictives

The following verbs normally allow a copredicative adjective (the list is not exhaustive): verbs of movement (*xuli-* 'walk', *ŋene-* 'go, leave', etc.), decausative perception verbs (*ise-pte-* 'be seen', *düi-pte-* 'be heard'), and some intransitive verbs (*bagdi-gi-* 'be born', *bagdi-* 'live', *te:-* 'sit'). The copredicative Adjective is always postposed with respect to the nominal it modifies, and does not have to be immediately adjacent to it. It necessarily takes the Instrumental case, while the modified nominal (the subject) is obviously in the Nominative.

(1427) a.   *Mo:*   *nemnec'e-zi*   *ise-pte-ini.*
        tree   thin-INST   see-DEC-3SG
        'The trees look thin.'

      b.   *Uti ñ'aula*   *ami-mi*   *bubei-zi*
        this child   father-REF   similar-INST
        bagdi-gi-e-ni.
        live-REP-PAST-3SG
        'This child was born looking like his father.'

      c.   *Nua-ni*   *sebzeŋke-zi*   *ŋeni-ge.*
        he-3SG   cheerful-INST   go-PERF
        'He left cheerful.'

Below we illustrate the Nominative adjectival depictive, which is a fairly rare case.

(1428) a. *Eku   te:-mi.*
           quiet   sit.PAST-1SG
           'I was sitting quiet.'
       b. *Si   elu   ni:-ne-h-i.*
           you   adult   man-V-PAST-2SG
           'You became adult.' (K 314)
       c. *Su: xutag'ai   ise-pte:-ni.*
           sun crimson   see-DEC.PAST-3SG
           'The sun seemed crimson.' (SK 391)

19.6.2.2. Object depictives

Certain direct objects also allow copredicative determiners. These are mostly objects of creation verbs such as *wo:-* 'make' and *uli-* 'sew' (1429), verbs of appearance and change of possession like *bu:-* 'give' (1430) and a few other verbs which have a resultative component in their meaning (1431). As in the case of subject depictives, the depictive adjective which modifies the object of creation is postnominal and takes the Instrumental case.

(1429) a. *Sagdi-zi*   *wo:-jo*   *kuxña-wa.*
           large-INST   make-IMP.2SG   kitchen-ACC
           'Make a kitchen large.'
       b. *Nua-ti*   *ei*   *uniŋa-wa*   *aisi-zi*   *wo:-ti.*
           he-3PL   this   spoon-ACC   gold-INST   make.PAST-3PL
           'They made this spoon from gold.'
       c. *'Ana*   *xe:-we-ni*   *agbi-agbi-zi*
           boat   bottom-ACC-3SG   wide-wide-INST
           o:-ti.
           make.PAST-3PL
           'They made the bottom of the boat very wide.' (SK 109)

(1430) *Min-du*   *zä:-wa*   *xul'a-zi*   *bu-o:-ti.*
       me-DAT   money-ACC   extra-INST   give-PAST-3PL
       'They gave me extra money.'

(1431) *ŋala-ti*   *begdi-ti*   *tu:*   *sakäm-zi*
       hand-3PL   foot-3PL   all   bloody-INST
       čuhasi-e-ti.
       beat-PAST-3PL
       'They beat their hands and feet till they were bleeding.' (SK 1077)

Note that objects of most transitive verbs, that is, those that cannot be characterized as verbs of appearance and creation, do not control depictives. Thus, in (1432a) secondary predication is expressed with the regular relative clause, while a depictive structure would be impossible (1432b).

(1432) a. *Bi   ise:-mi   nua-ma-ni   koŋko:-mo-ti.*
           me   see.PAST-1SG   he-ACC-3SG   beat.PP-ACC-3PL
           'I saw him beaten.'
        b. **Bi ise:-mi   nua-ma-ni   koŋko-ktu-zi*
           me   see.PAST-1SG   he-ACC-3SG   beat-RES-INST
           'I saw him beaten.'

The direct object modified by a depictive may be deleted under coreference with a previously mentioned element. In all other respects the construction is the same as with the overtly present object.

(1433) a. *Zugdi   malu-le-ni   ule-ze-fi*
           house   corner-LOC-3SG   dig-SUBJ-1PL.IN
           na:-wa,   sagdi-zi   ule-ze-i.
           large-INST   dig-SUBJ-2SG   dig-SUBJ-IMP.2SG
           'Let us dig earth in the corner of the house, dig it more (literally: large).'
        b. *Xaŋgus'a-zi   ule:-ti.*
           shallow-INSTR   dig-PAST-3SG
           '(They) have dug a shallow hole.'

An example of the Nominative adjectival object depictive is presented below.

(1434) *ñoligi   butu-o:-ni   aka-wa-ni.*
        black   paint-PAST-3SG   back-ACC-3SG
        'He painted his back black.' (SKX 216)

19.6.2.3. Number agreement

The subject (1435) and the object (1436) control number agreement on the depictive adjective. There is never a Plural marker on the noun itself.

(1435) a. *Nua-ti   zo:ŋku-ŋku-zi   bagdi:-ti.*
           he-3PL   poor-PL-INST   live-3PL
           'They live poorly.'
        b. *Ei   mo: gugda-ŋku-zi   i:wo:-ti.*
           this   tree   tall-PL-INST   grow.PAST-3PL
           'These trees grew tall'.

   c.   *Sagdä-ŋku*   *ju-o:-ti.*
         big-PL   grow-PAST-3PL
         'They grew big.' (K 170)

(1436) a.   *Zueze-we*   *aja-ŋku-zi*   *wo:-ti.*
         table-ACC   nice-PL-INST   make.PAST-3PL
         'They made tables nicely.'
   b.   *ŋic'a-ŋku-zi*   *xua-ini.*
         small-PL-INST   cut-3SG
         'He cuts it into small (pieces) (literally: he cut them small).'
   c.   *Kusige-we*   *etei-ŋku-zi*   *ziu-gi-se.*
         knife-ACC   sharp-PL-INST   sharpen-REP-PP.PAS
         'The knives are sharpened sharp.'
   d.   *Kakčima-wa*   *ŋic'a-ŋku-zi* *montolie*   *bombolie*
         flat.cake-ACC   small-PL-INST round   round
         kakčima-ŋisi:.
         flat.cake-V.PRP
         'They make flat cakes small and very round.' (SK 541)

This property formally differentiates depictives from qualificative adverbs derived from adjectives with the Instrumental suffix -*zi* (10.1.3.1.1). The latter never take Plural agreement.

Chapter 20
Complement subordinate clause

This chapter deals only with non-finite complement clauses. Finite complement clauses, and, in particular, direct and indirect speech constructions, are addressed in Chapter 18. On subordinate questions see section 23.1.4.

The complement subordinate clause in Udihe is a sentential argument with the syntactic role of the subject (20.1) or the direct object (20.2). The predicate of the non-finite complement clause is expressed by the Infinitive (7.6.3), a participle (7.6.1) or, less frequently, by the Purposive Converb (7.6.2.1). The particular strategy of forming the complement clause is mostly determined by the matrix verb, therefore the verbs that require each particular type of complement subordinate clause are given here in a representative list. The chapter is organized according to the formal types of the complement subordinate clauses which basically correspond to the valence patterns of the matrix verbs.

As in the other subordinate clauses (Chapters 19 and 21), the subject of the complement subordinate clause may or may not be coreferential with the superordinate clause subject. In the former case the subordinate clause predicate is marked by same-subject switch-reference affixes, in the latter case by different-subject affixes. The coreferential subject is often anaphorically dropped, either from the superordinate clause or from the subordinate clause. Some types of complement subordinate clauses allow only either same-subject or different-subject. These are discussed in more detail.

In the sentence, the subject complement clause (sentential subject) occupies the linear position usually associated with the subject (see 24.1.2). The object complement subordinate clause normally immediately precedes its head, the matrix verb, but it can also be separated from the matrix verb by VP adverbs or other elements. The postposing of the complement clause in the postverbal position is allowed. The complement clause itself is head-final, although younger speakers occasionally allow non-verb-final complement clauses, apparently under the influence of the Russian word order (1.5.2.2.2). The subject, if overtly present within a complement clause, tends to occupy the leftmost position.

20.1. Sentential subject

20.1.1. Infinitival sentential subject

The infinitival sentential subject is possible with one- or two-place predicates of state that normally participate in copula constructions in the superordinate clause (17.2.3.1). The copula predicates that take sentential subject complements are the following:

(1437) *ge:*   'bad'   *aja*   'good'
       sebzeŋke   'interesting'   *xei*   'tasty'
       maŋga   'difficult'   *tuge*   'quick'
       eke   'slow'   *go:*   'long'
       gugda   'high'   *zas'a*   'easy'
       seuni: 'dangerous, scary'   *so:ndo*   'sin'
       jaza   'OK'   *sei*   'chilly'
       safani   'tiring, boring'   *egdi*   'a lot'
       kiab'au   'tight' (SK 1013)   *ñamai*   'warm'
       ba: anči   'no place'
       liŋga-liŋga bie 'sticky'
       tembu-tembu bie 'springy'

The modal predicates that belong to this group are actually Past passive participles or Necessitative passive participles of the verbs *metu-* 'finish, accomplish' and *mute-* 'possible' in the affirmative and the negative form:

(1438) a. *metu-se*   'finished'
           e-u-se metu   'unfinished
       b. *mute-u-zeŋe*   'possible'
           e-u-zeŋe mute   'forbidden, not possible'

Normally these predicates take the experiencer argument expressed by the Dative noun phrase (17.2.3.1). The second argument (if present) may correspond to the subordinate clause controlled by the Dative experiencer of the superordinate clause (20.1.1.3). When the predicates listed in (1437) govern the complement subordinate clause whose subject is not coreferential with the Dative experiencer, the subordinate clause is finite. This case is treated in 18.3.1.5. Finally, the impersonal non-controlled infinitival subordinate clause may function as the only argument (20.1.1.1).

20.1.1.1. Impersonal clauses

The impersonal sentential subjects are semantically close to finite agentless clauses (16.2.5). However, as distinct from finite agentless constructions, it seems that sentential subject clauses are mostly of generic character, and cannot be interpreted as indefinite (in the sense of "not known to the speaker"). Both the simple Infinitive (1439) and the Impersonal Infinitive (1440) occur in this type, but the latter is more typical of the Northern dialect.

(1439) a. *Ei   teŋku-le   te:-mi   ketu   nektes'e.*
          [this   chair-LOC   sit-INF]   very   short
          'This chair is very short to sit on.'

    b. *Xoton-tigi   ŋene-mi   da:s'a.*
          [city-LAT   go-INF]   close
          'It is not far to go to the city.'

    c. *Suese-we   aisi-gi-mi   e-u-zeŋe   metu.*
          [axe-ACC   mend-REP-INF]   NEG-PAS-FP   finish
          'It is not possible to mend the axe.'

    d. *Ei   wo:-tigi   tukti-mi*
          [this   mountain-LAT   climb-INF]
          metu:-zeŋe.
          finish.PAS-FUT
          'It is possible to climb this mountain.'

    e. *Gäunda-zi   ŋene-mi   eke.*
          [pole-INST   go-INF]   slow
          'It is slow to move with poles (on the river).'

(1440) a. *O-du   bagdi-mu   aja.*
          [this-DAT   live-IMI]   nice
          'It is nice to live here.'

    b. *Ge: cemne-mu.*
          bad   [deceive-IMI]
          'It is bad to deceive (people).'

    c. *Seuni: emus'e   xuli-mu.*
          dangerous   [alone   travel-IMI]
          'It is dangerous to travel alone.' (SK 848)

Furthermore, it appears that the matrix predicate (an adjective) can express the number of an object participant of the subordinate clause. We have only one example at our disposal: in (1441) the adjectival Plural marker *-ŋku* indicates the plurality of the subordinate clause object *mo:-wo* 'trees'. The subordinate clause is shown in brackets.

(1441) *Ei   mo:-wo   juosi-mi   zas'a-ŋku.*
     [this   tree-ACC   cut-INF]   easy-PL
     'It is easy to cut these trees.'

20.1.1.2. Personal clauses

Occasionally, the infinitival construction may be used in a personal sense. The subject is not specified but refers to particular people, cf.:

(1442) a.   *Gusi-mi   seuni: ede:-ni.*
        [play-INF]   dangerous   become.PAST-3SG
        'The game became dangerous.'
      b.   *Zile   xegie-le-ni   digene-mu   aja bi-ze.*
        [anvil   under-LOC-3SG   hide-IMI]   nice be-SUBJ
        'It would be nice to hide under the anvil.' (K 157)

The Infinitival clause governed by the matrix predicate *aja* 'nice' has a personal meaning when the subject is either overtly present (1443) or deleted under coreference (1444). Since the Infinitive does not take agreement markers, the subject agreement is suppressed. Such a subordinate clause expresses a wish or indirect exhortation.

(1443) a.   *Abuga-i   eme-gi-mi-de   aja.*
        [father-1SG   come-REP-INF-FOC]   nice
        'It would be nice if my father came.'
      b.   *Si   xeli   bude-mi-de   aja.*
        [you   soon   die-INF-FOC]   nice
        'I wish you would die soon!'
      c.   *Si   teŋku-i   camna:-ma-ni*
        [you   chair-2SG   break.PP-ACC-3SG
        aisi-mi-de   aja.
        mend-INF-FOC]   nice
        'It would be nice if you repaired the broken chair.'

(1444) a.   *Ni:-we   alasi-mi-de   aja.*
        [man-ACC   wait-INF-FOC]   nice
        'It would be nice to wait for this man.' (K 144)
      b.   *Ei-mi   nodo-de   aja.*
        [NEG-INF   lose-INF]   nice.
        'I wish he wouldn't lose (it).'
      c.   *W'ali-m(i)   aja.*
        [fight-INF]   nice
        'It would be nice to fight (meaning: let us fight).' (K 177).

20.1.1.3. Dative control

The predicates of state listed in 20.1 take the experiencer Dative argument (see also 17.2.3.1) that controls the subordinate clause. The subordinate clause subject must be coreferentially omitted. This is shown with the symbol Ø in the glosses.

(1445) a.   *O-du*   *xuli-mi*   *sin-du*   *aja.*
         [Ø this-DAT   walk-INF]   you-DAT   good
         'It is nice for you to walk here.'

       b.   *Bi*   *aziga-du-i*   *b'oto-wo*   *diga-mi*
         me   girl-DAT-1SG   [Ø mushroom-ACC   eat-INF]
         xei.
         tasty
         'It is tasty for my daughter to eat mushrooms.'

       c.   *Ei*   *kaŋa-la*   *nuan-di-ni*   *ŋua-mi*
         this bed-LOC   he-DAT-3SG   [Ø sleep-INF]
         ketu   *tembu-tembu*   *bie.*
         very   spring-string   be.PRES.HAB
         'It feels like a spring for him when he sleeps on this bed.'

       d.   *Ei*   *teŋku-le*   *te:-mi*   *nuan-di-ni*   *aja.*
         [Ø this   chair-LOC   sit-INF] he-DAT-3SG   good
         'It is nice for him to sit on this chair.'

In this type the predicates *mute-u-zeŋe* 'possible', *e-u-zeŋe mute* 'be forbidden, not possible', *metu-se* 'finished', *e-u-se metu* 'unfinished' do not occur since their meaning is impersonal. The equivalent personal meaning is rendered by means of finite constructions in one of the non-indicative moods.

    A sentential subject of this type is often expressed by the Infinitive with the Durative derivational suffix (8.2.2.4), see also 20.2.1.

(1446) a.   *Min-du*   *ketu*   *maŋa*   *sun-du*   *bagdi-kce-mi.*
         me-DAT   very   strong   [you-DAT   live-DUR-INF]
         'It is very difficult for me to stay with you.'

       b.   *Min-du*   *safani:*   *etete-kce-mi.*
         me-DAT   boring   [work-DUR-INF]
         'I got bored working.'

    This construction sometimes allows a Nominative subject as well, in the same way as the variation Nominative/Dative is acceptable in the Desiderative copular construction (17.2.3.2).

(1447) *Bi-le*   *j'e-le-de*   *mafa-la-mi*   *aja.*
        me-FOC   what-LOC-IND   man-V-INF   good
        'It is good for me to marry somebody.' (SKX 188)

20.1.2. Participial sentential subject

This is an infrequent type. Unlike the previous two varieties of sentential subjects, the participial sentential subject does not occur with the predicates of state listed in 20.1, but is a complement to the decausative perception verbs such as *düi-pte* 'is heard' and *ise-pte* 'is seen' or the decausative verb *sau-pte-* 'be known' (see also in section 16.1.4.2).

(1448) a. *Iñi:-ti*   *düi-pte.*
           [laugh.PRP-3PL]   hear-DEC
           'Laughing is heard.'
       b. *Nua-ni*   *jexe-i-ni*   *go:-lo*   *düi-pte.*
           [he-3SG   sing-PRP-3SG]   far-LOC   hear-DEC
           'His singing is heard far away.'
       c. *Ni:*   *xuli:-ni*   *sa-u-pte-ini.*
           [man   walk.PRP-3SG]   know-CAUS-DEC-3SG
           'It is known that people walk (here).'

It seems that it is possible to introduce participial sentential subjects by means of some copular predicates. However, we may simply deal here with two coordinated clauses.

(1449) a. *Bueni*   *bagdi:-ni*   *min-digi*   *go:-do*
           he   live.PRP-3SG   me-BL   far-FOC
           ei   *bie.*
           NEG   be.PRES.HAB
           'He doesn't live far from me.'
       b. *Deu-i-ni*   *anči-gde*   *odo:-ni.*
           get.tired-PRP-3SG   no-FOC   become.PAST-3SG
           'Tiredness went away.' (SK 116)
       c. *Sita-ni*   *xauntasi-si:-ni*   *xeŋteni bi-si-ni.*
           child-3SG   ask-IM.PRP-3SG   bored   be-PAST-3SG
           'She was bored with her son's questions.' (SKX 172)
       d. *Ei*   *wah*   *odo:-ni.*
           NEG.PRP   kill   become.PAST-3SG
           'Time came when you cannot kill anything.' (SKX 210)

20.2. Sentential object

The sentential complements follow several distinct morpho-syntactic strategies determined by the individual matrix predicate.

20.2.1. Infinitival sentential object

The infinitival complement clause is always of the same-subject type. Some of the matrix verbs that govern the infinitival complement clause exhibit a semantic similarity with the typical auxiliary verbs in other languages, while other verbs correspond semantically to typical subject-control verbs. In fact, it is not at all clear whether such constructions in Udihe should be treated as biclausal or monoclausal ("clause-union" type). Normally, the Infinitive precedes the matrix verb and the subject of the two verbs appears only once on the surface, preceding the Infinitive.

The following verbs take an infinitival subject-controlled complement clause: aspectual (phase) verbs (1450a), some modal predicates (1450b), emotional and evaluative predicates (1450c), and cognitive verbs (1450d). The complement clause has the factive meaning.

(1450) a. *zafanda-*   'begin'
         metu-   'finish
         wadi-   'finish'
     b. *ñoni-*   'can'
         mute-   'be able, can'
         ča:la-   'want'
         nixe-   'have to'
         dakca-   'be going'
         kokpi-   'have enough time, manage'
         ekele anči bi-   'have no time'
     c. *gäŋda-*   'be lazy'
         juŋde-   'like, be fond of'
         kese-   'suffer'
         safani: b'a-   'get bored'
         juede-   'be enthusiastic'
         muñali-   'be sorry to'
         elu-   'be bored'
         jemei b'a-   'get disgusted'
         ŋele-   'be afraid'
         azana-   'be embarrassed'
         xakza-   'be embarrassed'
     d. *tati-*   'get accustomed'
         s'aina-   'get accustomed'

egze-   'be expert at'
tatusi-   'learn'

Examples:

(1451) a. *Iwana   wadi-e-ni   jexe-mi.*
           Ivan   stop-PAST-3SG   [sing-INF]
           'Ivan stopped singing.'

b. *Nua-ni   ñoni:-ni   uli-mi.*
    he-3SG   can-3SG   [sew-INF]
    'She can sew.'

c. *Bi   odu   te:-mi   safani: b'a-mi.*
    me   [here   sit-INF]   boring   get.PAST-1SG
    'I am bored sitting here.'

d. *Uti   ni:-tigi   ise-si-mi   jemei b'a-ini.*
    [this   man-LAT   see-IM-INF]   disgust get-3SG
    'He is disgusted to look at this man.'

e. *Bi   sita-i   ba:-za   ge-tigi-ni*
    me   son-1SG   [place-N   surface-LAT-3SG
    xuli-mi   aja   egze-ini.
    walk-INF]   good be. expert-3SG
    'My son is an expert at orienting in the forest.'

The verbs *azana-* 'be embarrassed', *xagza-* 'be embarrassed, *kese-* 'suffer', as well as the modal verbs *mute-* 'be able', *elu-* 'ne bored', *muñali-* 'be sorry to', and *kokpi-* 'have enough time, manage' often introduce an imperfective durative situation and co-occur with the Infinitive augmented by the Durative suffix *-kcA* (8.2.2.4), cf. also 20.1.1.3.

(1452) a. *Si   emus'e   bagdi-kce-mi   kese-i.*
           you   [alone   live-DUR-INF]   suffer-2SG
           'You are suffering from living on your own.'

b. *Gagi-kce-mi-de   e-si-de   kokpi-gi.*
    [take-DUR-INF-FOC]   NEG-PAST-FOC   manage-REP
    '(She) did not manage to take (it) away.'

c. *Tukä-kca-mi   ei-ni   mute.*
    [run-DUR-INF]   NEG-3SG   can
    'He can't run.'

d. *Ag'a   muñali-e-ni   mun-du*
    brother   sorry-PAST-3SG   [we-DAT
    ule:-we   bu-kce-mi.
    meat-ACC   give-DUR-INF]
    'The brother felt sorry for giving us some meat.'

20.2.2. Participial sentential object

In the participial complement clause the subordinate predicate is an active participle in one of the tensed forms. The participle takes the Accusative case and the personal inflection referring to the subject of the subordinate clause (different-subject). In same-subject sentences the participle is not inflected for case (is in the Nominative). This has a formal parallel in the construction with the reflexive object: the Accusative of the reflexive element is formally homonymous to the Nominative, see 22.3.2. The following types of participial sentential object are distinguished: object-controlled clause (20.2.2.1), non-controlled clause (20.2.2.2), and arbitrary controlled clause (20.2.2.3).

20.2.2.1. Object control

The subordinate clause subject may be controlled either by the direct object (20.2.2.1.1) or by the indirect object (20.2.2.1.2) of the matrix clause. A necessary prerequisite for omitting one of the coreferential arguments (either a subordinate clause subject or a matrix clause object) is the overt presence of its antecedent in the linearly preceding clause. Note that the referential null in the subordinate subject position can control reflexivization (22.32.3.2).

20.2.2.1.1. Direct object control

Object-control matrix verbs take the complement clause in which the subject is controlled by the Accusative object of the matrix clause. The subject may be overtly present in the subordinate clause in the Nominative form, but can also be omitted under coreference. In both cases the personal different-subject inflection of the participle refers to the subject of the subordinate clause. The following verbs take the object-controlled complement clause:

(1453) *alasi-*   'wait'   *belesi-*   'help'
      xaja-   'disturb'   *daɲuli-*   'disturb'

In the sentence the object-controlled complement clause is not normally adjacent to the object of the superordinate clause, but follows the matrix verb, cf.:

(1454) a. *Ei   b'ata   abuga-i   belesi-e-ni*
        this boy   father-REF   help-PAST-3SG
        zugdi-we   *wo:-mo-ni.*
        [house-ACC   make.PP-ACC-3SG]
        'This boy helped his father to build the house.'

b. *Bi   sin-e-we   o-du   alasi-ze-mi*
   me you-0-ACC   this-DAT   wait-SUBJ-1SG
   (si)   eme-gi:-we-i.
   [(you)   come-REP-PRP-ACC-2SG]
   'I will wait for you here until you return.'

Typically the object must be overtly present within the matrix clause. However, when the subordinate clause precedes the matrix clause and contains the overt subject, the object can be anaphorically omitted, cf.: (1455a) and (1455b).

(1455) a. *Ñ'aula-ziga*   *od'o-wo-i*   *xaja-iti*
           child-PL   grandfather-ACC-REF   disturb-3PL
           etete-i-we-ni.
           [work-PRP-ACC-3SG]
           'The children disturb the grandfather's work.'
       b. *Bi   etete-i-we-i*   *xaja-i.*
           [me work-PRP-ACC-1SG]   disturb-2SG
           'You are disturbing my work.'

20.2.2.1.2. Indirect object control

The verb *ka:ni:-* 'forbid' takes a complement clause controlled by the Lative indirect object, as in (1456b). In (1456a) it is omitted under coreference with the previously introduced subordinate clause subject.

(1456) a. *Wrač-u*   *Iwana* *jexe-i-we-ni*   *ka:ni:-ni.*
           doctor-0   [Ivan   sing-PRP-ACC-3SG]   forbid-3SG
           'The doctor forbids Ivan to sing.'
       b. *Abuga-i*   *ka:ni:-ni*   *sin-tigi*
           father-1SG   forbid-3SG   you-LAT
           xuli:-we-i   *ba:*   *xo:n-dile-ni.*
           [walk.PRP-ACC-2SG   place   top-LOC-3SG]
           'The father forbids you to go to the forest.'

20.2.2.2. Non-controlled participial clauses

Due to their semantics, some matrix verbs require the complement participial clause in which only a different subject is allowed and the subject of the subordinate clause is not controlled by any argument within the superordinate clause. The subordinate clause subject in this case must be overtly expressed within the subordinate clause as a Nominative noun phrase. As in all participial

subordinate clauses, the participial inflects for the Accusative case and obviously takes only different-subject personal inflections.

The following verbs belong to this type:

(1457) *zakta-*   'imitate'   *aju-*   'like'
       nitine- 'gossip'

Sentence examples:

(1458) a. *Kolo*   *aju:-ini*   *si*   *teluŋu-si:-we-i.*
          Kolo   like-3SG   [you   story-V-PRP-ACC-2SG]
          'Kolo likes what you are telling.'
     b. *Bi*   *'ai-we*   *umi:-we-i*   *nitine-iti.*
          [me vodka-ACC   drink.PRP-ACC-1SG]   gossip-3PL
          'They are gossiping that I drink vodka.'
     c. *Bi* *käŋa* *buni:-we-ni*   *zakta-mi.*
          me [deer   roar.PRP-ACC-3SG]   imitate-1SG
          'I imitate the deer roaring.'

20.2.2.3. Participial clauses with arbitrary control

This frequent type is formally similar to the previous one, however the subject of the complement clause can be controlled by the subject of the superordinate clause (same-subject situation) or by any other element within the superordinate clause or outside it (different-subject situation). In the former case, the subject is not overtly present in the complement clause itself. In the latter case it is optional. The participle takes the Accusative in different-subject sentences; in same-subject sentences, the Accusative marking on the participle is missing (see 22.5.1.2). On the Instrumental participial clause see 20.2.2.3.5.

As demonstrated below, with matrix verbs of saying and perception the complement clause tends to be located post-verbally although the preverbal position is also common.

20.2.2.3.1. Verbs of arbitrary control

Matrix verbs that belong to this group are cognitive verbs, verbs of saying, perception and evaluation, mostly with a factive but sometimes also with a non-factive meaning:

(1459) *t'osi-*   'dream'   *sa:-*   'know'
       zoŋi-   'remember'   *agda-*   'be glad'
       xono-   'be surprised' *oŋmo-*   'forget'

teluŋusi-	'tell	*soŋo-*	'cry about'
ise-	'see'	*düisi-*	'hear'
iñe-	'laugh'	*sebune-*	'be interested'
mede-	'feel'	*xaundasi-*	'ask'
egze-	'realise'	*dogdi-*	'hear'
b'a-	'find, see'	*dian-*	'tell about, speak about'

20.2.2.3.2. Different-subject sentences

Examples of different-subject sentences are:

(1460) a.   *Bu teluŋu-si-e-mu*   *wakca-i*   *ni:-tigi*
          we   story-V-PAST-1PL.IN   hunt-PRP   man-LAT
          nua-ti   *zugdi-we*   *wo:-mo-ti.*
          [he-3PL   house-ACC   make.PP-ACC-3PL]
          'We told the hunter that they have built the house.'

     b.   *Bi xono:-mi*   *nua-ti*
          me get.surprised-1SG   [he-3PL
          eme-gi-e-me-ti.
          come-REP-PP-ACC-3PL]
          'I was surprised that they returned.'

     c.   *Bi mede-mi*   *abuga-i*
          me feel-1SG   [father-1SG
          eme-gi-e-me-ni.
          come-REP-PP-ACC-3SG]
          'I feel that the father has come.'

     d.   *Bi ise:-mi*   *si*   *etete-i-we-i.*
          me see.PAST-1SG   [you   work-PRP-ACC-2SG]
          'I saw that you were working.'

     e.   *Zu: ni:*   *ŋene-i-we-ni*   *ise:-ni.*
          [two   man   go-PRP-ACC-3SG]   see.PAST-3SG
          'He saw two men walking.'

20.2.2.3.3. Same-subject sentences

In same-subject sentences the subordinate participle takes no case inflection, cf.:

(1461) a. *Nua-ni*   *teluŋu-si-e-ni*   *min-tigi*
        he-3SG   story-V-PAST-3SG   me-LAT
        Moskva-tigi   *xuli-e-mi.*
        [Moscow-LAT   go-PP-SS]
        'He told me that he had travelled to Moscow.'
   b. *Jexe-ze-mi*   *men-e*   *bagdi-e-mi.*
        sing-SUBJ-1SG   [REF-0   live-PP-SS]
        'Let me sing about my own life.'
   c. *Zugdi-tigi*   *ŋene-zeŋe-mi-de*   *oŋmo:.*
        [house-LAT   go-FP-SS-FOC]   forget.PAST
        'He forgot to go home.'

20.2.2.3.4. Impersonal clauses

The impersonal interpretation of the subordinate clause is licensed by the impersonal form of the participle. The subject of the subordinate clause is naturally absent.

(1462) *Wakca-i-we*   *dian-a-ini.*
       [hunt-PRP-ACC]   say-0-3SG
       'He speaks about hunting.'

20.2.2.3.5. Participial Instrumental clauses

The verb *ŋele-* 'be afraid' takes a participial complement clause in which the participle has the Instrumental case (and not the Accusative as in most other complement clauses). Only the Future Participle occurs in this clause, both in the different-subject (1463a) and same-subject (1463a) form.

(1463) a. *Bi* *ŋele-mi*   *nua-ni*   *unugu-le-zeŋe-zi-ni.*
        me be.afraid-1SG [he-3SG   illlness-V-FP-INST-3SG]
        'I am afraid he will get sick.'
   b. *Nua-ni*   *ŋele-ini*   *teŋku-digi*
        he-3SG   be.afraid-3SG   [chair-ABL
        tiŋme-le-zeŋe-zi:.
        fall-SING-FP-INST.SS]
        'He is afraid to fall from the chair.'

The verb *ŋele-* can also take the infinitival complement (20.2.1), in which case the complement clause is always subject-controlled.

20.2.2.3.6. "Double-object" constructions with the complement clause

The following verbs allow a second direct object in addition to the object complement clause:

(1464) *ceze-*   'believe somebody about something'
    (w)uisi--   'rescue somebody from something'
    sa:-   'know something about somebody'
    dian-   'say something to somebody'
    sa-wan-   'inform somebody about something'
    dogdi-   'listen to somebody saying something'

As demonstrated by the following examples, the non-sentential direct object does not have to be coreferential with any elements of the subordinate clause:

(1465) a. *Nua-ni*   *min-e-we*   *uisi-e-ni*   *kuti*
      he-3SG   me-0-ACC   rescue-PAST-3SG   [tiger
      min-tigi   *xokco-i-we-ni.*
      me-LAT   attack-PRP-ACC-3SG]
      'He rescued me from the attack of the tiger.'
   b. *Bi* *bude-zeŋe-we-i*   *nua-ni*   *min-e-we*
      [me dye-FP-ACC-1SG]   he-3SG   me-0-ACC
      uisi-e-ni.
      rescue-PAST-3SG
      'He rescued me from death.'
   c. *Nua-ma-ni*   *teu*   *sa:-iti*   *men-e*
      he-ACC-3SG   all   know-3PL   [REF-0
      mamasa-i   *wa:-ma-ni.*
      wife-REF   kill.PP-ACC-3SG]
      'Everybody knows about him that he has killed his wife.'
   d. *Bi* *sin-e-we*   *ceze-mi*   *Iwana*
      me you-0-ACC   believe-1SG   [Ivan
      eme-gi-zeŋe-we-ni.
      come-REP-FP-ACC-3SG]
      'I believe you that Ivan will return.'
   c. *Sagdi-nta-fai*   *teu-ni*   *dogdi-zeŋe-ti* *nua-ni*
      big-N-REF.PL   all-3SG   listen-FUT-3PL he-3SG
      j'e-we-de   *digan-a-i-we-ni.*
      what-ACC-IND   say-0-PRP-ACC-3SG
      'All people will listen to what their old man is saying.' (SKX 310)

20.2.2.4. Copular complement clauses

There are two formal types of the complement participial clause with the adjectival copular predicate (such as those addressed in 17.2.2.1.1). First, the copula can be overtly present as the subordinate participial predicate which, according to the general rule, takes the Accusative case and the personal inflection that refers to the subordinate clause subject.

(1466) a. *Bi sa:-mi bäsa eŋme*
me know-1SG [channel wide
bi:-we-ni.
be.PRP-ACC-3SG]
'I know that the channel is wide.'

b. *Bi ise:-mi uti ni:*
me see.PAST-1SG [that man
muľ-muľ bi:-we-ni.
teethless-teethless be.PRP-ACC-3SG]
'I saw that this man is toothless.'

c. *Bi sa:-mi nua-ti elu ni:*
me know-1SG [he-3SG honest man
bi:-we-ti.
be.PRP-ACC-3PL]
'I know that they are honest people.'

d. *Bi sa:-mi uti pag'a bi:-we-ni.*
me know-1SG [that stupid be.PRP-ACC-3SG]
'I know that he is stupid.'

In the second case the copula is omitted and the Accusative and personal inflections attach to the adjective itself.

(1467) a. *Bi ise:-mi bäsa eŋme-we-ni.*
me see.PAST-1SG [channel wide-ACC-3SG]
'I saw that the channel is wide.'

b. *Bi sa:-mi uti pag'a-wa-ni.*
me know-1SG [that stupid-ACC-3SG]
'I know that he is stupid.'

c. *Bi abuga-i sa:-ini bi kui*
me father-1SG know-3SG [me very
maŋga-wa-i.
strong-ACC-1SG]
'My father knows that I am very strong.'

d. *Nua-ni iñi:-ni bi xanxi-we-i.*
he-3SG laugh-3SG [me foolish-ACC-1SG]
'He is laughing over that I am foolish.'

There is no apparent semantic difference between the two types of the copular adjectival subordinate clauses.

20.2.2.5. Complement clauses and relative clauses

Complement clauses of arbitrary control exhibit remarkable formal parallelism with internal relative clauses, that is, relative clauses where the predicate follows the relativized noun (19.2). Ambiguity may arise if the head noun corresponds to the object of the superordinate clause verb and this verb may also take a complement clause. Thus,

(1468)	*Bi*	*guaizime*	*ŋua-i-we-ni*			*b'a-mi.*
	me	[bear	sleep-PRP-ACC-3SG]			find.PAST-1SG

means both 'I saw a sleeping bear' and 'I saw that the bear was sleeping'.

In this situation the correct reading can sometimes be deduced from the subject determiner within the subordinate clause and the character of the subject itself. Usually the subject of the relative clause is indefinite and the subject of the complement clause is definite. For example, in (1469) the subject is modified by the anaphoric pronoun *uti* 'this' (1469a), or is a personal pronoun (1469b) and personal pronouns are unlikely to relativize. These examples only allow a complement reading.

(1469) a.	*Bi*	*ise:-mi*		*uti*	*ni:*		
	me	see.PAST-1SG		[this	man		
	muḷ-muḷ		*bi:-we-ni.*				
	toothless-toothless		be.PRP-ACC-3SG]				

'I saw that this man is toothless.'
*'I saw that man who is toothless.'

b.	*Bi*	*sa:-mi*		*si*	*c'o*	*aja*	*wakca-i*
	me	know-1SG		[you	very	good	hunt-PRP
	ni:		*bi:-we-i.*				
	man		be.PRP-ACC-2SG]				

'I know that you are a good hunter.'
*'I know you who are a good hunter.'

In (1470) the subject of the subordinate clause is indefinite and the preferred reading is with the relative clause although a complement clause reading is also possible.

(1470) *Bi   omo   ni:-we   ise:-mi*
     me   one   man-ACC   see.PAST-1SG
     muľ-muľ   *bi:-we-ni.*
     [toothless-toothless   be.PRP-ACC-3SG]
     'I saw one man who was without teeth.'
     'I saw that one man was without teeth.'

Example (1471) lacks any formal indicators of the definiteness/indefiniteness of the noun *bäsa* 'channel' and is totally ambiguous between the "complement" and the "relative" reading.

(1471) *Bi   sa:-mi   bäsa   eŋme   bi:-we-ni.*
     me   know-1SG   [channel   wide   be.PRP-ACC-3SG]
     'I know that the channel is wide.'
     'I know a channel which is wide.'

Note also that if the subject in the relative clause is not relativized it is always clause-initial, and the participle immediately follows the head noun (19.2.3). However, the subject of the complement clause does not have to be clause-initial. Consequently, (1472) is an example of the complement clause and cannot be understood as a relative clause because the subordinate subject (*mafa* 'bear') is preceded by another element internal to the embedded clause (the object *kalima-wa* 'whale').

(1472) *Uti ni: kalima-wa   mafa   diga-i-we-ni*
     this man   [whale-ACC   bear   eat-PRP-ACC-3SG]
     b'a-ni.
     found.PAST-3SG
     'This man saw that the bears were eating the whale.' (K 176)
     *'This man saw the bears that were eating the whale.'

20.2.2.6. Evidential complement clause

According to the materials of Simonov, Kjalundzjuga and Xasanova (1998), in the Northern dialect the evidential particle *gune* may introduce a complement clause formed with the participle in the Accusative. The meaning of this construction is the same as the meaning of the finite clauses containing *gune* (see 12.1.2.1). It is exemplified below.

(1473) a.   *Malta*   *aɲi-la-ni*   *pogo*   *buŋ-me-ti*
           back   side-LOC-3SG   body   cover-PP-3PL
           gune.
           EV
           '(It looks like) there is a covered body by the back (of the house).'
           (SKX 132)

       b.   *Bi-mie*   *bi-mie*   *bua*   *pou-pou*
           be-INF   be-INF   place   dark-dark
           odo-li:-we   *gune.*
           become-INC.PRP-ACC   EV
           'After a while (he saw that) it grew dark outside.' (SKX 210)

       c.   *Dogbo*   *nada*   *gaja-ziga*   *zugdi*
           night   seven   bird-PL   house
           xo:n-dile-ni   *dono-gi:-we*   *gune.*
           top-LOC-3SG   perch-REP.PRP-ACC   EV
           'In the night (he heard) that seven birds perched on top of the
           house.' (SKX 218)

We have no evidence for such a construction in the Southern dialect.

20.2.3. Converbial sentential object

The converbial sentential complement is expressed by the Purposive Converb (7.6.2.1).

20.2.3.1. Subject control

The Purposive Converb takes personal inflections that cross-reference the subordinate subject, either different-subject inflections or same-subject inflections. The converbial subject-controlled complement clause has irrealis modality: it always refers to the prospective situation in the future with respect to the moment of speech.

20.2.3.1.1. Subject-control verbs

The following verbs take the subject-controlled converbial complement clause:

(1474) *ča:la-*   'agree'   *nixe-*   'be going to'
        dakca-   'be going to'   *xeline-*   'be in a hurry'
        belexi-   'prepare'   *safa-*   'be tired'
        alasi-   'wait'

Examples:

(1475) a. *Maša*   *etete-tigi*   *ŋene-lege-mi*   *xeline-ini.*
           Maša   [work-LAT   go-PURP-SS]   hurry.up-3SG
           'Maša is in a hurry for work.'

      b. *Minti*   *gulin-e-lege-fi*   *belexi-fi.*
           we   [leave-0-PURP-SS.PL]   prepare-1PL.EX
           'We are preparing to leave.'

      c. *Bagdi:*   *getu*   *zugdeme*   *zugde-me*
           live.PRP   PL   Zugdeme   Zugdeme
           gune-lege-ti   *safa:-ni.*
           say-0-PURP-3PL   be.tired.PAST-3SG
           'He was tired that everybody called Zugdeme Zugdeme.' (K 148)

20.2.3.1.2. The verb *dakca-* 'be ready to, be going to'

The verb *dakca-* 'be ready to, be going to' is a subject-control verb which takes either the infinitival complement clause or the converbial complement clause. The infinitival clause is present when there is no active participation of the subject in the subordinate situation (1476a). The converbial clause is used when the subject is supposed to control the situation of the subordinate clause (1476b).

(1476) a. *Ele*   *xuili-mi*   *dakca:-ni.*
           [soon   boil-INF]   be.going.PAST-3SG
           'It was going to boil.'

      b. *Nua-ti*   *Moskwa-tigi*   *ŋene-lege-fi*
           he-3PL   [Moscow-LAT   go-PURP-SS.PL]
           dakca-iti.
           be.going-3PL
           'They are going to go to Moscow.'

20.2.3.1.3. The verb *nixe-* 'be going to, have to'

The verb *nixe-* normally means 'do, make', but it can also have modal meaning. When it takes the converbial subject-controlled complement it means 'be going to do something', while when it takes the infinitival subject-controlled complements it rather means 'have to do something', compare (1477) with (1478).

(1477) a. *Bi Oloŋo-tigi*   *ŋene-mi*   *nixe-mi.*
           me [Olon-LAT   go-INF]   do-1SG
           'I have to go to Olon.'

b. *Men-e   kaiŋku-i   gene-gi-lege-mi*
    [REF-0   brake-REF   fetch-REP-PURP-SS]
    nixe-ini.
    do-3SG
    'She has to take back her brake (for leather).'

(1478) a. *Ma:ma-i   uli-lege-mi   nixe-ini.*
           grandfather-1SG   [sew-PURP-SS]   do-3SG
           'My grandmother is going to sew.'
       b. *Ugda-tigi   tugbu-lege-mi   nixe-ini.*
           [boat-LAT   cut.wood-PURP-SS]   do-3SG
           'He is going to cut wood for the boat.'
       c. *Bi   zali-we   wo-logo-mi   nixe-mi.*
           me   [barn-ACC   make-PURP-SS]   do-1SG
           'I am going to make a barn.'

20.2.3.2. Object control

In object-controlled converbial clauses, the subordinate subject is coreferential with the object of the superordinate clause. The object is normally dropped under coreference and cross-referenced by different-subject inflections on the converb. As in the case of the subject-controlled converbial clause, the object-controlled converbial clause expresses the irrealis modality.

20.2.3.2.1. Direct object control

With the following matrix verbs the superordinate clause Accusative object controls the subordinate clause:

(1479) *tatusi-*   'teach'   *ñumnisi-*   'teach'
       gele-   'ask'   *mudeusi-*   'persuade'

Sentence examples:

(1480) a. *Nua-ni   min-e-we   gele-ini   bi*
           he-3SG   me-0-ACC   ask-3SG   [me
           belesi-lege-i.
           help-PURP-1SG]
           'He asked me to help.'
       b. *Bi   Ñura-wa   uli-lege-ni   tatusi-mi.*
           me   Niura-ACC   [sew-PURP-3SG]   teach-1SG
           'I teach Njura to sew.'

20.2.3.2.2. Indirect object control

For the following group of verbs the complement clause is controlled by the indirect object that corresponds to the Lative recipient argument of the matrix verb:

(1481) *oño-*   'write'   *dian-*   'say'

Sentence examples:

(1482) *Dian-a-ja*   *abuga-tigi*   *nua-ni*   *min-tigi*
      tell-0-IMP.2SG   father-LAT   [he-3SG   me-LAT
      eme-lege-ni.
      come-PURP-3SG]
      'Tell your father to come to see us.'

20.2.3.2.3. The verb *kaja-* 'send, order'

The verb *kaja-* has two valence patterns with slightly different meanings: it takes the Accusative argument in the meaning 'send', and the Lative argument in the meaning 'order'; in both cases this argument controls the complement clause; compare (1483) and (1484).

(1483) a.   *Eniŋe-i*   *min-e-we*   *kaja:-ni*
          mother-1SG   me-0-ACC   send.PAST-3SG
          limona-wa   *t'ei-ne-lege-i.*
          [schizandra-ACC   collect-DIR-PURP-1SG]
          'My mother sent me to collect berries of *schizandra* (a local variety
          of creeper).'
     b.   *Jegdige*   *min-e-we*   *kaja:-ni*   *si*
         hero   me-0-ACC   send.PAST-3SG   [you
         aziga-ŋi-we-i   *gele-lege-i.*
         daughter-AL-ACC-2SG   ask-PURP-1SG]
         'The hero sent me to ask (you to give him) your daughter.' (K 158)

(1484) *Wakca-na-laga-ti*   *kaja:-mi*   *bi*
      [hunt-DIR-PURP-3PL   order.PAST-1SG]   me
      nua-ti-tigi.
      he-PL-LAT
      'I ordered them to go hunting.'

The object can be omitted from either the complement clause or the superordinate clause, or both. In the latter case, the only overt marker of the

controlling argument is the different-subject personal inflection on the subordinate predicate.

(1485) *Wakca-na-laga-ti*   *kaja:-mi.*
      [hunt-DIR-PURP-3PL]   order.PAST-3PL
      'I ordered them to go hunting.

Chapter 21
Adverbial clause

Most adverbial clauses in Udihe are non-finite: they can be infinitival, participial, or converbial. The morphology of the Infinitive, the active participles, and the converbs is described in Chapter 7; other types of participles are not used in the adverbial clause (for the one exception see 21.3.1.6). The semantic type of the infinitival and converbial adverbial clauses is largely determined by the subordinate predicate itself, that is, by the particular type of converbs or infinitive. The semantic type of the participial clause is normally conditioned by the case- or postpositional marking on the participle. In this chapter, the adverbial non-finite clauses are classified according to their formal and semantic types.

Typically the position of the adverbial clause in the sentence is either at the beginning or at the end. It does not intrude between verbal arguments or between an argument and the verb, with the exception of the infinitival manner clause (21.1.1) when it consists of one word (the predicate). There is a strong tendency to front the adverbial clause. However, a purpose clause is usually postverbal.

21.1. Infinitival adverbial clauses

The infinitival adverbial clause expresses the manner or a concomitant action, but it may also have a wide range of additional meanings (temporal, causal, or concessive). Not infrequently it has a coordinative function, that is, is not syntactically embedded in the matrix clause.

The infinitival clause is normally controlled by the subject of the superordinate clause. Some exceptions to this rule are addressed in 15.1.1.6.2.

21.1.1. Manner clauses

The following examples illustrate the infinitival clause of manner or concomitant action. The situations of the superordinate and the subordinate clause are simultaneous in this case, and the subordinate clause situation is normally imperfective.

(1486) a.   *Sugzä*   *susa-li-e-ni*   *men-e amä:la-i*
           fish   escape-INC-PAST-3SG   [REF-0 after-REF
           ugda-wa   *taŋda-mi.*
           boat-ACC   carry-INF]
           'The fish escaped carrying the boat after itself.'

      b.   *ŋua-ini*   *xeŋpi-mi-de.*
           sleep-3SG   [snore-INF-FOC]
           'He sleeps snoring.'

      c.   *Solo-mi*   *nua-ni*   *uli-tigi*
           [move.upstream-INF]   he-3SG   water-LAT
           ete:-ni.
           look.PAST-3SG
           'He looked at the water while moving upstream.'

      d.   *Nua-ni*   *soŋo-mi*   *teluŋu-si-e-ni.*
           he-3SG   [cry-INF]   story-V-PAST-3SG
           'He was speaking while crying.'

      e.   *Bi eke-le*   *anči*   *bi-mi*   *zeuze-we*
           me [time-LOC   no   be-1SG]   food-ACC
           diga-mi.
           eat-INF
           'I eat in a hurry (literally: being without time).'

21.1.2. Coordinative clauses

Less frequently the infinitival clause expresses an action which is anterior with respect to the situation of the superordinate clause. This action tends to immediately precede the superordinate clause situation without being separated from it by a large interval of time, and is perfective:

(1487) a.   *Zauŋa*   *tene*   *nua-ma-ni*   *ise-mi*
           greenling   CONT [he-ACC-3SG   see-INF]
           täli-e-ni.
           escape-PAST-3SG
           'And the greenling (a sort of salmon), having seen him, escaped.'

      b.   *Ba:-za*   *ge-digi-ni*   *eme-gi-mi*
           [place-N   surface-ABL-3SG   return-REP-INF]
           etete-li-gi-e-ni.
           work-INC-REP-PAST-3SG
           '(Immediately) after returning from the forest, he started working.'

      c.   *Nua-ni*   *ŋele-mi*   *susa-gi-e-ni.*
           he-3SG   [be.afraid-INF]   escape-REP-PAST-3SG
           'Having got frightened, he escaped again.'

d. *Jegdige*   *tukä-ma-mi*   *um'a-i*
    hero   [run-INTN-INF]   hook-REF
    gagi-e-ni.
    take-PAST-3SG
    'The hero ran and took his hook.' (K 143)

Examples (1487) might best be translated into European languages using the coordinated construction, cf. for (1487a): 'the greenling saw him and escaped', for (1487b) 'He returned from the forest and started working', etc. Indeed, coordination of this type is missing in Udihe and the adverbial infinitival clause is its closest equivalent.

21.1.3. Causal clauses

An additional causal meaning of the infinitival clause is demonstrated by the following examples.

(1488) a. *Agda-mi*   *abuga* *soŋo-li-e-ni.*
           [be.happy-INF]   father   cry-INC-PAST-3SG
           'The father cried from happiness.'
       b. *Deu-mi*   *eke:-ni.*
           [get.tied-INF]   stop.PAST-3SG
           'He stopped from tiredness.'
       c. *Gekti-mi*   *bude:-ni.*
           [freeze-INF]   die.PAST-3SG
           'He died from cold.'
       d. *Lali-mi*   *bude:-ni.*
           [starve-INF]   die.PAST-3SG
           'He died from hunger.'

21.1.4. Concessive clauses

An additional concessive meaning of the infinitival adverbial clause is illustrated below.

(1489) a. *Ñ'aula*   *bi-mi*   *kui-ni*   *anči.*
           [young   be-INF]   strength-3SG   no
           'Although he is young, he does not have strength.'

b. *Nina*   *ic'a*   *bi-mi*   *xai*   *min-e-we*
    [Nina   small   be-INF]   still   me-0-ACC
    belesi:-ni.
    help-3SG
    'Although Nina is small, she helps me.'

c. *Zo:ŋku*   *bi-mi*   *e-iti*   *etete.*
    [poor   be-INF]   NEG-3PL   work
    'Although they are poor, they don't work.'

In concessive clauses the infinitival predicate is often followed by the contrastive focus particle *-gdA* (12.1.1.8).

(1490) *Nua-ni*   *ñ'aula-gda*   *bi-mi*   *ñukte-ni*
       [he-3SG   child-FOC   be-INF]   hear-3SG
       c'ama   *ede:-ni.*
       white   become.PAST-3SG
       'Although he is young, his hair has become white.'

21.2. Participial locational clauses

The participial locational clause corresponds to the adverbial clause introduced by 'where' in European languages. It can have different spatial meanings of the locative, lative, and ablative type. It is formed with the personal form of the active participle, which takes the corresponding case suffix or postposition, and the personal inflection indicating the subject of the subordinate clause. Such a subordinate clause is formally indistinguishable from the headless relative clause (19.5) with an empty head referring to some kind of place, and should perhaps be analyzed as such.

The following sentences illustrate the locational adverbial clause, in which the participle takes Locative (1491), Dative (1492), Ablative (1493), and Lative (1494) case marking, or is followed by a locational postposition (1495).

(1491) a. *Magazina* *bi-si-le-ni*   *kuluba-wa*
           [shop   be-PP-LOC-3SG]   club-ACC
           wo-woŋ-ki-ti.
           make-CAUS-PAST-3PL
           'They have built a club where there used to be a shop.'

       b. *Bi* *'ana-wa*   *egdi* *ni:* *bi-zeŋe-le-ni*
           me   boat-ACC   [many   man   be-FP-LOC-3SG]
           nede-zeŋe-mi.
           put-FUT-1SG
           'I will put my boat where there will be a lot of people.'

c. *Dampi:*   *zugdi*   *bi-sin-dile-ni*   *zuf*
[old   house   be-PP-LOC-3SG]   exactly
tegi-ze-i.
stand-SUBJ-2SG
'Stand exactly at the place where the old house was.' (K 166)

(1492) a.   *Anana*   *bi*   *bagdi-en-du-i*   *mo:*
[long.ago   me   live-PP-DAT-1SG]   tree
bagdi-gi-e-ni.
grow-REP-PAST-3SG
'Where I used to live trees have grown up again.'

b.   *Buji*   *gä:ma:-ni*   *ni:*   *bi-sin-di-ni*
animal   bone-3SG   [man   be-PP-DAT-3SG]
bi-si-ni.
be-PAST-3SG
'The bones of the animals were in the place where men used to live.'
(Schneider 1936: 143)

(1493) a.   *Soŋo*   *gegbeŋku-we*   *bi*   *nede:-digi:*
bear   berry-ACC   [me   put.PP-ABL.1SG]
gagi-e-ni.
take-PAST-3SG
'A bear took berries from where I put them.'

b.   *Bi*   *abuga-i*   *etete-i-digi:*   *e-si-ni*
me   father-1SG   [work-PRP-ABL.SS]   NEG-PAST-3SG
eme-gi.
come-REP
'My father has not come from work.'

(1494) a.   *Bi*   *egdi*   *b'oto*   *bagdi:-tigi-ni*
me   [many mushroom   grow.PRP-LAT-3SG]
ŋene-zeŋe-i.
go-FUT-1SG
'I will go to where there are many mushrooms.'

b.   *Düisi-en-tigi*   *gakpasi-e-ni.*
[hear-PP-LAT.SS]   shoot-PAST-3SG
'He was shooting towards where he heard (the sounds).' (Schneider
1936: 143)

(1495) a.   *To:*   *zegde-i-ni*   *do-lo-ni*
[fire   burn-PRP-3SG   inside-LOC-3SG]
bi-si-mi.
be-PAST-1SG
'I was in the burning fire.'

b. *Uti Zu:li sita ŋua-i-ni kä:-la-ni*
   that Zuli [child sleep-PRP-3SG side-LOC-3SG]
   eme:-ni.
   come.PAST-3SG
   'That Zuli came closer to the sleeping child.' (Schneider 1937: 70)

c. *Su: gakpa-i-ni eh-tigi-ni nede-iti.*
   [sun raise-PRP-3SG side-LAT-3SG] put-3SG
   'They put (it) in the direction of the raising sun.' (SK 229)

21.3. Temporal clauses

To form a temporal adverbial clause, converbs, or participles with different case and postpositional marking, are used.

21.3.1. Participial temporal clauses

In the participial temporal clause postpositions follow the Present or Past active participles in the personal form. All postpositions take the 3rd person Singular inflection (on the personal inflection of postpositions see 10.2.1.2). The meaning of such a clause and its temporal relationship to the situation of the superordinate clause is largely determined by the postposition itself. Alternatively, the participle in the temporal adverbial clause takes case inflections, although in this function only a few cases are possible.

21.3.1.1. Temporal clauses with the postposition *zuliete, zulieni* 'before'

Only the Present Participle co-occurs with this postposition. The situation of the subordinate clause follows the situation of the superordinate clause.

(1496) a. *Si eme-gi: zuliete Iwana*
       [you come-REP.PRP.2SG before] Ivan
       magazina-tigi xuli-se:-ni.
       shop-LAT go-EXP.PAST-3SG
       'Ivan had gone to the shop before you came.'

b. *Bi mamasa-la-i zulie-ni emus'e*
   [me wife-V-PRP.SS before-3SG] alone
   bagdi: bi-s'e-i.
   live.PRP be-PERF-1SG
   'Before I got married, I lived on my own.'

c. *Gäwa-na-i zulie-ni ŋen'e.*
   [dawn-V-PRP before-3SG] go.PERF
   'He left before dawn.' (SK 336)

21.3.1.2. Temporal clauses with the postposition *amä:lani* 'after'

The subordinate clause predicate corresponds to the Present Participle. The situation of the subordinate clause precedes the situation of the superordinate clause:

(1497) a.   *Sie-we*   *b'a-mi*   *amä:-la-ni*
       [wound-ACC   get.PP-SS   behind-LOC-3SG]
       ge:-zi   *dogdi-mi.*
       bad-INST   hear-1SG
       'After I got wounded, I heard badly.'

   b.   *Nua-ni*   *ŋene:-ni*   *amä:-la-ni*   *bi*
       [he-3SG   go.PP-3SG   behind-LOC-3SG]   me
       emus'e   *esi-gi-e-mi.*
       alone   become-REP-PAST-1SG
       'After he left, I remained alone.'

   c.   *Keige*   *diga-i:*   *amä:-la-ni*   *begdi:*
       cat   eat-PRP.SS   behind-LOC-3SG   leg.REF
       ku'ai: *au-ini.*
       ear.REF   wash-3SG
       'The cat washes paws and ears after eating.' (SK 195)

21.3.1.3. Temporal clauses with the postposition *dexi* 'until'

The situation of the subordinate clause expressed with the Present Participle indicates the temporal limit for the situation described in the superordinate clause.

(1498) a.   *Men-e*   *sagdani:*   *dexi*   *o-du*
       [REF-0   get.old.PRP.SS   until]   this-DAT
       bi-zeŋe-ni.
       be-FUT-3SG
       'He will live here until he gets old.'

   b.   *Belem*   *umac'a*   *ede-i-ni*   *dexi*
       [completely   short   become-PRP-3SG   until]
       xua-ja.
       cut-IMP.2SG
       'Cut until it gets completely short.'

21.3.1.4. Temporal clauses with the postposition *ekindini, ekinduni, doloni* 'when, during'

The situations of the superordinate and the subordinate clause are simultaneous, but do not last for the same period of time; normally the situation of the superordinate clause is included in the temporal interval described by the subordinate clause. Both Present and Past Participles seem to be allowed in this type, depending on the time reference of the adverbial clause.

(1499) a. *Bu bana:-u   ekindini*
            [we move.PP-1PL.EX   when]
            ma:ma-u   bude:-ni.
            grandmother-1PL.EX   die.PAST-3SG
            'Grandmother died when we were moving.'
       b.   *Bi etete-i   ekindini   min-e-we*
            [me work-PRP.1SG   when]   me-0-ACC
            e-zi-u   daɲula.
            NEG-IMP-2PL   disturb
            'Don't disturb me when I am working.'

A similar meaning may sometimes be rendered by the postposition *dolo-ni* 'inside', cf.:

(1500) *ɲene-i   dolo-ni   čegente-i.*
        go-PRP   inside-3SG   chase.away-2SG
        'While you are walking you are chasing (animals) away.' (SKX 28)

21.3.1.5. Temporal clauses with the postposition *agdaduni, agdalini* 'while'

The situation of the superordinate and the subordinate clause are simultaneous and develop in parallel for roughly the same period of time. Only Present Participles are used.

(1501) a. *Si   dian-a-i   agda-du-ni   bi*
            [you   talk-0-PRP.2SG   between-DAT-3SG]   me
            čaja-wa   teu   umi-e-mi.
            tea-ACC   all   drink-PAST-1SG
            'While you were talking, I drank all the tea.'
       b.   *Bi   jexe-i   agda-li-ni*
            [me   sing-PRP.1SG   between-PROL-3SG]
            nua-ni   teu   diga:-ni.
            he-3SG   all   eat.PAST-3SG
            'While I was singing, he ate everything.'

21.3.1.6. Temporal clause with the postposition *edeisini* 'when'

The time reference of the situations described in both the superordinate clause and the subordinate clause are in the future; however, the subordinate predicate is the Past Participle (1502) or Past passive participle (1503). Mostly same-subject sentences occur in this type.

(1502) a. *Xoton-tigi   ŋene: edeisini   mä:usa-wa*
          [city-LAT   go.PP   when]   gun-ACC
          gada-zaŋa-ti.
          buy-FUT-3PL
          'When they go to the city, they will buy a gun.'

     b. *Ba:-za   ge-digi-ni   eme-gi-e*
          [place-N   surface-ABL-3SG   come-REP-PP
          edeisini   etete-li-zeŋe-ni.
          when]   work-INC-FUT-3SG
          'When he comes back from the forest, he will start working.'

     c. *Bi   umi-e   edeisini   jexe-zeŋe-i*
          [me drink-PP   when]   sing-FUT-1SG
          'When I drink, I will sing.'

(1503) a. *Seutige   na:-la   buge-se   edeisini   kuŋka*
          [nut   earth-LOC   put-PP.PAS   when]   cedar
          bagdi:-ni.
          grow-3SG
          'A nut, when put in earth, grows into a cedar tree.'

     b. *Waŋba-wa xugi-le-te   edeisini   e-ini*
          [turtle-ACC turn-SING-FOC   when   NEG-3SG]
          mute   xugi-kce-mi.
          can   turn-DUR-INF
          'If you turn a turtle (upside down), it can not turn (back).'

In the clauses with the postposition *edeisini* the Past Participle is used in its impersonal form, that is, it does not take any affixes indicating same-subject or different-subject. This probably reflects the origin of the construction in question: the postposition *edeisini* is historically the Perfective Converb of the verb *ede-* 'become' optionally augmented by the 3rd person affix *-ni* (< *ede-isi-ni*). Originally the subordinate clause construction might have had the possessive meaning, and the literal translation of the subordinate clause in (1502a), for example, should have been something like 'their becoming of going to the city'. The content verb here acts in its bare form, as the possessor normally does (13.1).

21.3.2.7. Temporal clauses with the participle in the Ablative

The ablative case suffix *-digi-* marks the participle in the adverbial clause with the meaning 'as soon as'. It can be either the Future Participle (1504a) or the Present Participle of the inchoative verb (1504b). The time reference of the superordinate clause is the future.

(1504) a. *Nua-ni*   *eme-gi:-digi-ni*
            [he-3SG   come-REP.PRP-ABL-3SG]
            ŋene-zeŋe-fi.
            go-FUT-1PL.IN
            'We will leave as soon as he comes.'
       b. *Tigde*   *tigde-li:-digi-ni*   *kuŋka*
            [rain   rain-INC.PRP-ABL-3SG]   cedar
            xegie-le-ni   *te:-zeŋe-fi.*
            under-LOC-3SG   sit-FUT-1PL.IN
            'As soon as it starts raining we will sit down under the cedar.'

The same structure can render the meaning 'since'.

(1505) *Ehineŋi jehi*   *seh*   *odo-ini*   *bahta*   *bagdien-digi-ni.*
        today   nice   year   become-3SG   boy   be.born.PP-ABL-3SG
        'Today it is nine years since the boy was born.' (SK 696)

21.3.2.8. Temporal clauses with the participle in the Instrumental

The adverbial clause with the Past Participle in the Instrumental case (with *-zi-* case inflection) mostly expresses the situation that is prior to the situation of the superordinate clause. This is only allowed when the subject of the subordinate clause is coreferential with the subject of the superordinate clause, and this is marked by same-subject personal inflections on the participle. The corresponding meaning for the different-subject clause is expressed by the Perfective Converb, see 21.3.4.

The subordinate construction with the Past Participle in the Instrumental case can be used only when the superordinate clause refers to the present or the past, while anteriority in the future may only be expressed by the Perfective Converb (21.3.2.2). Such an adverbial clause often implies a causal meaning, as in (1507). Exceptionally, it may also express simultaneous action (1508).

(1506) a. *Minti*   *go:go*   *ŋua:-zi-fi*
         [we   long   sleep.PP-INST-SS.PL]
         eteŋi-e-fi.
         wake.up-PAST-1PL.IN
         'After having slept for a long time, we woke up.'

      b. *Tigde*   *ba:-la*   *tigde:n-zi*
         [rain   place-LOC   rain.PP-INST.SS]
         wadi-e-ni.
         stop-PAST-3SG
         'The rain, after starting outside, finished.'

      c. *Zeuze-we*   *mala:-zi-fi*
         [food-ACC   consume.PP-INST-SS.PL]
         eme-gi-e-mu.
         come-REP-PAST-1PL.EX
         'After consuming the food, we came back.'

      d. *Čaja-wa*   *umi-mi*   *metu-o:n-zi*
         [tea-ACC   drink-INF   finish-PP-INST.SS]
         ŋene:-ni.
         go.PAST-3SG
         'After finishing drinking tea, he left.'

(1507) a. *Si*   *utebe*   *diaŋ-kin-zi:*   *xagza-i.*
         [you   so   say-PP-INST.SS]   be.ashamed-2SG
         'You are ashamed because you said so.'

      b. *Gektin-zi:*   *teu*   *buk-ki-ti.*
         [freeze.PP-INST.SS]   all   die-PAST-3PL
         'Everybody died from cold.' (K 121)

      c. *Jegdige*   *muisi-e-ni*   *susa:-ni*
         hero   think-PAST-3SG   [escape.PAST-3SG
         etete-zeŋe-zi:.
         work-FP-INST.SS]
         'The hero thought: she escaped from working.' (K 154)

(1508) *Si*   *soŋo:n-zi-gde*   *bagdi:.*
      [you   cry.PP-INST.SS-FOC]   live.PRP
      'You live crying.'

In the Northern dialect such a construction is also found in the different-subject sentences.

(1509) *Digene:n-zi-le*   *xaku*   *Zaŋdalafu*   *tekceli*
       [hide.PP-INST-CONT   soon]   Zandalafu   with.noise
       eme-gi-e-ni.
       come-REP-PAST-3SG
       'As soon as she hid, Zandalafu returned with noise.' (K 105)

21.3.2.9. Temporal clauses with the participle in the Accusative

This fairly rare type of temporal clause is based on the Accusative of the Present or Past Participle. It expresses a temporally associated situation, typically temporally close to the main clause situation, but the exact relationship between two clauses remains semantically non-specified. The subordinate clause may express a simultaneous and related situation involving a different participant (1510), as well as have a concessive or conditional meaning (1511), cf.:

(1510) a. *Ze*   *gulin-e-mi*   *nixe-i-we-ni*
            [soon   go-0-INF   do-PRP-ACC-3SG]
            tigde-li-e-ni.
            rain-INC-PAST-3SG
            'As soon as he was ready to leave, it started raining.'
    b. *Ono*   *nixe-zeŋe*   *kuliga ikte-me:-me-ni?*
            how   do-FUT   [snake   tooth-V.PP-ACC-3SG]
            'What to do when a snake bites (you)?'
    c. *Bi tausi:-we-i*   *kuge-je.*
            [Me forge.PRP-ACC-1SG]   pump-IMP.2SG
            'While I am forging, pump the bellows.' (SKX 284)
    d. *Ali*   *ami-m(i)*   *eme-gi-si-kce-i-we-ni*
            [when   father-REF   come-REP-IM-INT-PRP-ACC-3SG]
            ei-de   *teluŋu-si-wen-e.*
            NEG-FOC   story-V-CAUS-0
            'When the father was going to come home, she did not let him (her son) tell.'
    e. *B'oto*   *anana*   *taji-e-ti*
            mushroom   earlier   gather-PAST-3PL
            e-si-me-n(i)-de   *bolo-gi.*
            [NEG-PP-ACC-3SG-FOC   autumn-REP]
            'Earlier they gathered mushrooms before the autumn came.'

(1511) a. *Ono ja-za-mi*   *ni:*   *xuktu:-me-ni?*
            how PROV-SUBJ-1SH   [man   carry.away.PP-ACC-3SG]
            'What shall I do if somebody carried a man away?' (SKX 154)

b.   *Wa:-ma-i*   *ono*   *nixe-ze-mi?*
     [kill.PP-ACC-2SG]   how   do-SUBJ-1SG
     'If you killed (him), what shall I do?'

In the same-subject sentences the embedded participle is not marked for the Accusative (see 22.5.1.2), as shown in (1512). The subordinate clause may be formally passivized, as in (1513), where the subordinate clause is expressed by the impersonal passive Necessitative Participle marked by the 3rd person agreement affix. The corresponding passive and non-passive clauses are synonymous.

(1512) *Etete-zeŋe*   *bi-si-mi*   *Petra*   *Oloŋo-tigi*
       [work-FUT   be-PP-INF]   Peter   Olon-LAT
       ŋene:-ni.
       go.PAST-3SG
       '(Although) he had to work, Peter went to Olon.'

(1513) a.   *Bu   etete-u-zeŋe*   *bi-si-me-ni*   *'ai-we*
            [we   work-PAS-FP   be-PP-ACC-3SG]   vodka-ACC
            sene   *umi-u.*
            only   drink-1PL.EX
            '(Although) we have to work, we only drink vodka.'
       b.   *E-u-zeŋe*   *bi-si-me-ni*   *ŋene:-mi.*
            [NEG-PAS-FP   be-PP-ACC-3SG]   go.PAST-1SG
            '(Although) I did not have to I went.'

21.3.2.10. Temporal clauses with the participle in the Dative

The temporal copular clause may be marked with the Dative on the impersonal participle, normally when it refers to the natural phenomena (cf. also the Dative temporal adjuncts discussed under 15.4.2.1). However, example (1515b) below shows that this condition is not necessary.

(1514) *Timadu-le*   *z'e*   *su:*   *gakpain-du-ni*
       morning-LOC   [soon   son   rise.PP-DAT-3SG]
       eke   *ili-waŋ-ki-ni*   *uti*   *aziga.*
       quiet   stand-CAUS-PAST-3SG   that   girl
       'In the morning as soon as the son rose he put this girl so she stood quietly.' (SKX 162)

It should be noticed that in this type impersonal forms of participles are fairly frequently used although the embedded subject is overtly present.

(1515) a. *Timadu-le*   *puile*   *bi:-du*
        [morning-LOC   before.sunrise be.PRP-DAT]
        te:-gi-e-ni.
        sit-REP-PAST-3SG
        'He got up in the morning before sunrise.'(K 197)

     b. *So:ndo*   *sagdi* *sama-ziga*   *sama-si-si:-du*
        sin   [big   shaman-PL   shaman-V-IM.PRP-DAT]
        a:nta   *bi:-ni*   *zugdi-du.*
        woman   be-3SG   house-DAT
        'It is forbidden for a woman to be in any house where big shamans
        are shamanizing.' (SKX 214)

21.3.2.11. Temporal clauses with the participle in the Lative

These type of clauses denote temporal limit of the action.

(1516) a. *ŋiča*   *aziga* *sagdi* *odo-i-tigi*
        [little   girl   big   become-PRP-LAT]
        igi-si-e-ni.
        feed-IM-PAST-3SG
        '(The man) used to feed a little girl (his future wife) till she grew
        up.' (SK 351)

     b. *Jeh-ti*   *aŋa-ni*   *odo:-ni*   *bi*
        nine-ORD year-3SG   become.PAST-3SG   [me
        o-du   *bagdi:-tigi:.*
        this-DAT   live.PRP-LAT.1SG]
        'It is nice years since I have been living here.' (SK 696)

21.3.2. Converbial temporal clauses

21.3.2.1. Temporal clauses with the Imperfective Converb

The Imperfective Converb expresses a situation simultaneous to the situation of the superordinate clause. The subordinate clause serves as a temporal background for the superordinate clause. Both simultaneous situations refer to the past, so the Imperfective Converb conveys an absolute-relative tense: its intrinsic point of reference is both the moment of speech (anteriority) and some moment in the past (simultaneity). The situation of the subordinate clause is progressive in its character, and so tends to be the situation of the superordinate clause, although it can sometimes also describe a perfective event.

    Both same-subject (1517) and different-subject (1517) sentences are possible for this type.

(1517) a. *Nua-ti* *ñ'aula* *bi-ŋie-fi* *min-tigi*
   [he-3PL child be-IC-SS.PL] me-LAT
   mendele *xuli-du-ge.*
   often come-PL-PERF
   'When they were children, they often used to come to me.'

  b. *Xatala* *bi-ŋie-i* *ni:-we* *aju-o:-mi.*
   [girl be-IC-1SG] man-ACC love-PAST-1SG
   'When I was a girl, I loved one man.'

  c. *Ñ'aula* *bi-ŋie-i* *nua-ti* *coŋku-we-ti*
   [child be-IC-SS] he-3PL window-ACC-3PL
   xaji-e *bi-s'e-i.*
   break.PP be-PERF-1SG
   'When I was a child, I broke their window.'

  d. *Bi* *sita-i* *ic'a* *bi-ŋie-i* *bou* *bi-s'e.*
   [me son-1SG small be-IC-SS] fat be-PERF
   'When my son was small, he was fat.'

  e. *Minti ŋic'a bi-ŋie-fi* *udie* *keje-zi*
   [we small be-IC-SS.PL] Udihe language-INST
   m'ei *dian-ki-fi.*
   only speak-PAST-1PL.IN
   'When we were young, we were speaking only Udihe.'

(1518) a. *Tigde-ŋie-ni* *ba:*   *mo:*
   [rain-IC-3SG] place tree
   xegie-le-ni *te:-mi.*
   under-LOC-3SG sit.PAST-1PL.IN
   'When it was raining we were sitting under the tree.'

  b. *Eniŋe-i*   *cei-we* *cei-ŋisi-ŋie-ni* *bi*
   [mother-1SG soup-ACC soup-V-IC-3SG] me
   xunazi: *tege-we* *we-i* *bi-s'e.*
   sister.1SG gown-ACC make-PRP be-PERF
   'When my mother was cooking the soup, my sister was sewing a gown.'

  c. *Bi* *beixi* *ŋene-ŋie-i* *nua-ni* *jexe-i*
   [me out go-IC-1SG] he-3SG sing-PRP
   bi-s'e.
   be-PERF.
   'When I was going out he was singing.'

  d. *Bi* *eniŋe-i* *olokto-ŋie-ni* *bi*
   [me mother-1SG cook-IC-3SG] me
   belesi *bi-s'e-i.*
   help be-PERF-1SG
   'When my mother was cooking, I was helping.'

21.3.2.2. Temporal clauses with the Perfective Converb

The Perfective Converb expresses the perfective situation temporally anterior with respect to the situation of the superordinate clause. Anteriority holds for different tenses in the superordinate clause–the Past (1519), the Present (1520) and the Future (1521). The Perfective Converb conveys the relative past tense.

(1519) a.   *In'ei-we*   *tindaŋi-ge-si*   *ŋene:-ti*   *caixi.*
        [dog-ACC   let-PERF-PC.SS]   go.PAST-3PL   further
        'Having loosened the dogs they went further.'

     b.   *Nua-ni*   *o-du*   *bi:-ni*
        he-3SG   this-DAT   be-3SG
        bolo-gi-li:-si-ni.
        [autumn-REP-INC-PC-3SG]
        'He has been living here since autumn.'

(1520) a.   *Nua-ni*   *eme:-ni*   *magazina*
        he-3SG   came.PAST-3SG   [shop
        kimpigi:-si-ni.
        close-PC-3SG]
        'He came after the shop had closed.'

     b.   *Umi-du-ge-si*   *jexe-du*   *nua-ti.*
        [drink-PL-PERF-PC.SS]   sing-PL   he-3PL
        'Having drunk they usually sing.'

(1521) a.   *Tege-we*   *si*   *uli:-si*   *muzei-du*
        [gown-ACC   you   sew-PC.2SG]   museum-DAT
        bi-zeŋe-ni.
        be-FUT-3SG
        'After you sew the gown, it will be in the museum.'

     b.   *Omo*   *neŋi-ni*   *bi-s'e-si*   *ŋene-zeŋe-ni.*
        [one   day-3SG   be-PERF-PC.SS]   go-FUT-3SG
        'He will leave after having been (here) for one day.'

     c.   *Bi*   *eme-gi-ge-si*   *sin-tigi*
        [me   come-REP-PERF-PC.SS]   you-LAT
        zima-ẓaŋa-i.
        visit-FUT-1SG
        'When I come back, I will visit you.'

As discussed below, temporal clauses with the Perfective Converb have a slightly different meaning for the same-subject and the different-subject converbs, which may ultimately reflect the absence of formal parallelism between these two forms (cf. 7.6.2.3).

21.3.2.2.1. Same-subject sentences

The same-subject forms of the Perfective Converb tend to express not only, and perhaps not primarily, the temporal meaning (1522), but also the manner or the accompanying circumstances (1523), or clausal coordination (1524).

(1522) a. *Bi   sagdi   ed'e-si*   *wakca-zaŋa-i.*
          [me big   become.PERF-PC.SS]   hunt-FUT-1SG
          'When I get big, I will hunt.'
      b. *Dami-we*   *ŋikpes'e-si*   *tukca*
          [tobacco-ACC   breath.PERF-PC.SS]   hare
          simpi-li-e-ni.
          Sneeze-INC-PAST-3SG
          'After having breathed the tobacco, the hare started sneezing.'
      c. *Umi-ge-si:*   *jexe-i*   *nua-ni.*
          [drink-PERF-PC.SS]   sing-PPR   he-3SG
          'After drinking he sings.'

(1523) a. *Kept'e-si*   *taŋi:-ni.*
          [lie.PERF-PC.SS]   read-3SG
          'He reads lying down (having lain down).'
      b. *Bi   mo: do:-tigi-ni*   *ise-si-e-mi*
          me tree top-LAT-3SG   see-IM-PAST-1SG
          su:-we   ŋala-zi: *dakpi-ge-si.*
          [sun-ACC hand-INST.REF   close-PERF-PC. SS]
          'I was looking at the top of the tree, having blanked out the sun with my hand.'

(1524) a. *Kasanziga   xukti-wesi-ge-si*   *kepte-gi-e-ni.*
          [puppy   run-DIV-PERF-PC.SS]   lay-REP-PAST-3SG
          'The puppy lay down after having run.'
      b. *Bi   digaŋ-ka-si*   *ŋene:-mi.*
          [me say-PERF-PC.SS]   go.PAST-1SG
          'After having spoken I left.'
      c. *Bi   digan-a-kc'a-si*   *wadi-e-mi.*
          [me say-0-DES.PERF-PC.SS]   stop-PAST-1SG
          'I wanted to speak, (but) changed my mind.'

Such clauses, then, exhibit an anterior correlate to the infinitival adverbial clauses of manner or concomitant action (21.1), while a purely temporal meaning of anteriority for the same-subject temporal clauses is expressed by the participle in the Instrumental case (21.3.2.8).

21.3.2.2.2. Different-subject sentences

The different-subject converbial forms normally tend to express a purely temporal situation since the Instrumental participial clauses addressed in 21.3.2.8 are absent for different-subject sentences The adverbial clause corresponds to a perfective situation prior to the situation of the superordinate clause:

(1525) a. *Nua-ni*   *eme:-ni*   *magazina*
        he-3SG   came.PAST-3SG   [shop
        kimpigi:-si-ni.
        close-PC-3SG]
        'He came after the shop had closed.'
    b. *Xeŋdegi:-si*   *jakpa-na-gi:-ni,*   *bugdi:*
        [step-PC.1SG]   canyon-V-REP-3SG   [foot.REF
        windegi:-si   *kico-no-gi:-ni*   *bombo-no-gi:-ni.*
        lift-PC.1SG]   hill-V-REP-3SG   hillock-V-REP-3SG
        'When I step down, a canyon appears, when I lift my foot a hill appears, a hillock appears.'

If the superordinate clause verb is clearly imperfective, the subordinate clause may have a simultaneous meaning. In (1526a) it expresses the perfective event which takes place with the imperfective situation of the superordinate clause as its background (the superordinate clause verb is in the Progressive). In (1526b) the superordinate clause and the subordinate clause situations develop simultaneously in the past.

(1526) a. *Bi* *eme-gi:-si*   *bi*   *sita-i*   *ŋua-mi*
        [me come-REP-PC.1SG]   me   son-1SG   sleep-INF
        bi:-ni   *bi*   *mamasa-i*   *ule:-we*   *olokto-mi*
        be-3SG   me   wife-1SG   meat-ACC   cook-INF
        bi:-ni.
        be-3SG
        'When I come, my son is sleeping and my wife is cooking meat.'
    b. *Ag'a*   *zugdi:*   *wo-isi-ni*   *bu*
        [brother   house.REF   make-PC-3SG]   we
        belesi-u   *bi-s'e-u.*
        help-1PL.EX   be-PERF-1Pl.EX
        'When my brother was building a house, we were helping him.'

Like practically all temporal clauses, the temporal clause with the Perfective Converb can imply an additional causal meaning.

(1527) a. *Bi   sita-i*   *soŋo-isi-ni*   *utemi*
       [me son-1SG   cry-PC-3SG]   therefore
       amä:sa:-mi.
       be.late.PAST-1SG
       'I was late because my son was crying.'

    b. *Su:*   *su:ni:-si-ni*   *xokto   og'ou-gi-e-ni.*
       [sun   shine-PC-3SG]   road   dry-REP-PAST-3SG
       'The road dried up from the sun.'

    c. *Nua-ni*   *bude:-ni*   *kuliga ikteme-le-isi-ni.*
       he-3SG   die.PAST-3SG   [snake bite-SING-PC-3SG]
       'He died from a snake's bite.'

    d. *Bi   ge:*   *etete-isi:*   *tagda:-ni.*
       [me bad   work-PC.1SG]   get.angry.PAST-3SG
       'He got angry because I had worked badly.'

21.3.2.3. Temporal clauses with the Conditional Converb

Conditional Converbs are only used sporadically within a temporal clause.

(1528) a. *Ulikte*   *a:da-lisi-ni*   *sama*
       [shaman.lard   ready-CC-3SG]   shaman
       eme-ini   *joxo   kä:-tigi-ni.*
       come-3SG   pot   side-LAT-3SG
       'When the shaman lard becomes ready, the shaman comes to the
       pot.'

    b. *Ele*   *sikie-gi-lisi-ni*
       [soon   evening-REP-CC-3SG]
       susa-gi-kte-iti.
       escape-REP-DIST-3PL
       'As soon as evening comes, they run away.'

    c. *Nua-ni*   *ŋua-li:*   *xuanti:-ni.*
       [he-3SG   sleep-CC.SS]   snore-3SG
       'When he sleeps, he snores.'

    d. *Bua*   *xuen-di-ni*   *in'ei gekti-li:*   *to:*
       [place   surface-DAT-3SG   dog   freeze-CC.SS] fire
       kä:-la-ni   *keŋte-i*   *ñami-si:-ni.*
       side-LOC-3SG   side-REF   warm-V-3SG
       'When a dog freezes in the forest, it warms its sides near the fire.'
       (SK 373)

21.4. Purpose clauses

The purpose clause is marked by the Purposive Converb, which takes switch-reference markers, either of the same-subject (1529), or the different subject (1530).

(1529) a. *Bi ketu   egdi-me   diga:-mi*
           me   very   much-ACC   eat.PAST-1SG
           wakca-na-laga-mi.
           [hunt-DIR-PURP-SS]
           'I ate very much (so I would be able) to go hunting.'

       b. *ŋua-laga-mi   dakca:-ni.*
           [sleep-PURP-SS]   wrap.PAST-3SG
           'He wrapped himself up in order to sleep.'

(1530) a. *Si   teluŋu-si-je   nua-ti   sa-laga-ti.*
           you story-V-IMP.2SG   [he-3PL   know-PURP-3PL]
           'Tell so that they know.'

       b. *Wa-gi-weŋ-ki-ni   jegdige-we   teu*
           kill-REP-CAUS-PAST-3SG   hero-ACC   all
           ul'e-si   maŋga-na-gi-la:-ni.
           fead.PERF-PC.SS   [strong-V-REP-PURP-3SG]
           'She brought the hero to life, feeding him so he would become strong again.' (K 197)

       c. *Minti   abuga-tigi   zawonile-ze-fi   nua-ni*
           we   father-LAT   call-SUBJ-1PL.IN   [he-3SG
           eme-lege-ni.
           come-PURP-3SG]
           'We will call your father so that he comes.'

In the different-subject sentence, the subordinate subject can be arbitrarily controlled or controlled by any element of the superordinate clause. Examples (1531) illustrate control by the object of the superordinate clause; example (1532) illustrates control by the possessor within the superordinate clause. The controlled subject of the subordinate clause is omitted under identity with an element of the superordinate clause.

(1531) a. *Zueze   bugdi-we-ni   xua-je   ñaŋga*
           table   leg-ACC-3SG   cut-IMP.2SG little
           naktas'a   ede-lege-ni.
           [short   become-PURP-3SG]
           'Cut the table legs so they will be a little shorter.'

b. *Ña:*   *igbene-le:-ni*   *kedeliŋku-zi*   *kede-iti.*
[skin   soften-PURP-3SG]   brake-INST   brake-3PL
'They brake skin with brakes so that it gets softer.'

(1532) *Bi* *ugda-i*   *nüsisi-zeŋe-i*   *dogbo*
me boat-1SG   pitch-FUT-1SG   [night
e-lege-ni   *ise-pte.*
NEG-PURP-3SG   see-DEC]
'I will put pitch on the boat so that it won't be seen in the night.'

Purposive Converb sometimes renders the intentional meaning, without actually referring to the purpose, cf.:

(1533) *Pa-ligi*   *mafa-wa*   *gida-la:-mi*
black-ADJ   bear-ACC   spear-PURP-SS
auj-i   *wa:-ni.*
brother.in.law-REF   kill.PAST-3SG
'(Intending) to stab with a spear the black bear, he killed his brother-in-law.' (K 131)

21.5. *"Instead"-clauses*

The clause that corresponds to the English subordinate clause with the subordinator 'instead' is participial in Udihe. It can only be controlled by the subject of the main clause, that is, the participle takes the same-subject inflections. "Instead"-clauses vary in their modality.

21.5.1. Irrealis clauses

The irrealis "instead"-clause implies that the situation described by the superordinate clause has been realized contrary to the speaker's expectation described by the subordinate clause. The superordinate clause verb is therefore in one of the past tenses. Such a subordinate clause is expressed by the Future Participle in the Instrumental case.

(1534) a. *Ma:ma*   *tege-we*   *uli-zeŋe-zi:*
[grandmother   gown-ACC   sew-FP-INST.SS]
xoŋto-wo *gada:-ni.*
other-ACC bye.PAST-3SG
'Instead of sewing a gown, grandmother bought another one.'

b.   *Etete-zeŋe-zi:*   *'ai-we*   *sene*   *umi:.*
     [work-FP-INST.SS]   vodka-ACC   only   drink.PRP
     'Instead of working, he only drinks vodka.'

21.5.2. Realis clauses

In the second type of "instead"-clause the situation of the main clause itself has
not been realized but is either expected to be realized in the future (in which
case the verb has the Future form), or is induced by the speaker (in this case the
verb in the superordinate clause is in the Imperative). The modality of the
subordinate clause remains unspecified; it can be either realis or irrealis,
depending on whether the situation described by the subordinate clause is in
progress at the moment of speech or is hypothesized by the speaker. Such a
subordinate clause uses the Present Participle, followed by the postposition
bede 'like'. In the examples that follow, in (1535a) and (1535b) the situation of
the subordinate clause can be understood as either hypothesized or in progress,
in (1535c) it is certainly taking place at the moment of speech.

(1535) a.   *Bi   ni-we-de*   *geli:*   *bede*   *bi*
            [me who-ACC-IND   call.PRP.SS   like]   me
            men-e   *nixe-zeŋe-i.*
            REF-0   do-FUT-1SG
            'Instead of calling somebody, I will do it myself.'
      b.   *Si*   *uti*   *tege-we*   *saŋadi:*   *bede*
           [you   that   gown-ACC   mend.PRP.SS   like]
           imexi-we   *gada-ja.*
           new-ACC   buy-IMP.2SG
           'Instead of mending this gown, buy a new one.'
      c.   *Si*   *ute*   *bede*   *te:-i*   *bede*
           [you   that   like   sit-PRP.SS   like]
           jexe-je.
           sing-IMP.2SG
           'Instead of sitting like this, sing.'

21.6. Causal clauses

The causal relation between two clauses is expressed by a participial clause
with one of two specialized postpositions. The subordinate clause participle
only takes the Past or the Present form in this case. An additional causal
meaning may be implied by the infinitival clause (21.1.3) and different types of
temporal clauses (21.3).

21.6.1. Causal clauses with the postposition *dieleni* 'because'

The postposition *diele-ni* 'because' expresses the pure causal relationship:

(1536) a.   *Bi   dian-ki-mi   diele-ni   w'ali:-ti.*
            [me say-PP-1SG   because-3SG]   fight-3PL
            'They are fighting because of what I said.'

    b.   *Iwana   belesi-e-ni   diele-ni   zugdi-ne-mi*
          [Ivan   help-PP-3SG   because-3SG]   house-DEST-REF
          wo:-mi.
          make.PAST-1SG
          'I built a house because of Ivan's help.'

    c.   *Bi   Moskwa-du   aja   ñansule:-mi   diele-ni*
          [me Moscow-LAT   good   study.PP-SS   because-3SG]
          eitene   učitela-wa   etete-mi.
          now   teacher-ACC   work-1SG
          'Because I studied well in Moscow, I work as a teacher now.'

    d.   *Bi   xunazi: aja   etete:-ni   diele-ni*
          [me sister.1SG   good   work.PP-3SG   because-3SG]
          Moskwa-tigi   ŋene-wen-ki-ti.
          Moscow-LAT   go-CAUS-PAST-3PL
          'They sent my sister to Moscow for having worked well.'

21.6.2. Causal clause with the postposition *dalinka(n)di(ni)* 'thanks to'

The postposition *dalinka(n)di-ni* 'thanks to' does not express the cause as such, but rather implies that the situation of the adverbial clause has positively influenced the event described by the superordinate clause.

(1537) a.   *Ule:*   *men-e*   *zug-tigi*   *ŋene-ini*   *käsa*
            meat   REF-0   house-LAT   go-3SG   [eagle
            belesi:-ni   *dalinkandi-ni.*
            help.PRP-3SG   thanks-3SG]
            'The meat goes home by itself thanks to the eagle's help.'

    b.   *Si*   *belesi-e-i*   *dalinkadi*   *bi*   *oño-wo*
          [you   help-PP-2SG   thanks]   me   letter-ACC
          oño-u:ŋ-ki-mi.
          write-PAS.CAUS-PAST-1SG
          'Thanks to your help I wrote the letter.'

21.7. Comparative clauses

The comparative clause is formed by the participle followed by the comparative postposition *bede* 'like' or *čuli* 'exactly like'. Note that there is no ambiguity with the "instead"-clause which also uses the participle with the postposition *bede*, because in "instead"-clauses the superordinate verb is always in either the Future or the Imperative (21.5). In sentences with comparative clauses, although the comparative subordinate clause is itself formally identical to the "instead"-clause, the superordinate clause is clearly different: it expresses realis modality, and the matrix verb is in the Present or in one of the past tenses. The situation of the subordinate clause can be either real or hypothesized.

Examples of the same-subject (1538) and different-subject (1539) comparative clauses are:

(1538) a. *Bi abuga-i   ei   zulie-ni   xuli:*
           [me father-1SG   this   before-3SG   go.PRP.SS
           bede   xaisi   ute   bede   xuli:-ni   ba:-za
           like]   still   that   like   go-3SG   place-N
           ge-tigi-ni.
           surface-LAT-3SG
           'My father still goes hunting in the same way as he used to.'

    b. *Ei   dogdi: bede   te:-ini.*
        [this   hear.PRP.SS   like] sit-3SG
        'He is sitting as if he does not hear.'

    c. *Go: tukä-i   bede   dew-o:-ni.*
        [long   run-PRP.SS   like] get.tired-PAST-3SG
        'He got tired as if he was running for a long time.'

    d. *Mo: uli-we   xanä-zi   dakpisi:-ni*
        tree   water-ACC   shadow-INST   close-3SG
        xanäŋku-tigi   ise-si: bede-de.
        [mirror-LAT   see-IM.PRP.SS   like-FOC]
        'The trees cover the water with shadows, as if they look in a mirror.'

(1539) a. *Sin-e-we   gegbi-e-ti   bi   gegbi: bede.*
           you-0-ACC   call-PP-3PL   [me   call.PRP.1SG   like]
           'They called you as I am called.'

    b. *Xuda-si: ni: dili-zi: ima:-tigi*
        fur-V.PRP   man   head-INST.REF   snow-LAT
        pigdäm   ñuxana:-ni   seutige
        down   dive.PAST-3SG   [pine.cone
        tiŋme-i-ni   bede   kuŋka   duo-digi-ni.
        fall-PRP-3SG   like   cedar   top-ABL-3SG]

'The merchant dived with his head into the snow, like a pine cone
which falls down from the top of the cedar tree.'

c. *Sita-ziga*   *iŋña*   *od'o*   *digaŋ-ki-ni*
   child-PL   white.haired   old.man   say-PP-3SG
   čuľ-de   *xuli-li-e-ti.*
   like-FOC   walk-INC-PAST-3PL
   'The children started walking exactly as the white haired old man
   told (them).' (SKX 324)

21.8. Conditional clauses

In all conditional sentences the protasis is expressed by the subordinate clause
and the apodosis by the superordinate clause. Depending on the general
modality of the sentence, factual condition and counterfactual condition are
distinguished. Some infinitival clauses may also imply conditional meaning
(21.1.1).

21.8.1. Factual condition

21.8.1.1. Converbial clause

The subordinate clause predicate is expressed by the Conditional Converb with
same-subject or different-subject personal markers. The factual conditional
sentence normally refers to the future, therefore the matrix (aposodis) clause
verb is either in the Future (1540) or in the Subjunctive (1541).

(1540) a. *Aziga-ziga*   *olokto-lisi-ti*   *minti*
         [girl-PL   cook-CC-3PL]   we
         eme-gi-zeŋe-fi.
         come-REP-FUT-1PL.IN
         'If the girls cook the food, we will come back.'

   b. *Tigde*   *tigde-lisi-ni*   *mo:*   *xegie-le-ni*
      [rain   rain-CC-3SG]   tree   under-LOC-3SG
      teu-zeŋe-fi.
      sit-FUT-1PL.IN
      'If it starts raining, we will sit under the tree.'

   c. *Ñaŋmu*   *bi-lisi-ni*   *'ana-wa*   *aisi-zeŋe-i.*
      [nice   be-CC-3SG]   boat-ACC   mend-FUT-1SG
      'If the weather is nice, I will mend my boat.'

   d. *Ele*   *xakti-lisi-ni*   *bi*   *eme-zeŋe-i.*
      [soon   get.dark-CC-3SG]   me   come-FUT-1SG
      'If it gets dark soon, I will come back.'

 e. *Ña*   *kumte-lisi-u*   *nua-ni*   *sun-e-we*
   [again   turn.over-CC-2PL] he-3SG   you-0-ACC
   dukte-zeŋe-ni.
   beat-FUT-3SG
   'If you turn over again, he will beat you.'

 f. *Bi* *xoton-tigi* *ŋene-li:*   *sin-du*
   [me city-LAT   go-CC.SS] you-DAT
   konfeta-wa *gada-zaŋa-i.*
   candy-ACC buy-FUT-1SG
   'If I go to the city, I will buy you some candy.'

 g. *Nua-ni*   *ŋua-lisi-ni*   *teu* *eke*
   [he-3SG   sleep-CC-3SG] all quite
   dian-a-zaŋa-ti.
   say-0-FUT-3PL
   'If he will be sleeping, everybody will speak quietly.'

(1541) *Xuaŋgu-we*   *säŋguaza-wa* *sigua-wa*
   [cucumber-ACC melon-ACC watermelon-ACC
   zomi-lisi: *si* *aŋma-i*   *gojou-lo-zo.*
   steal-CC.2SG] you mouth-2SG crooked-V-SUBJ
   'If you steal a cucumber, a melon, or a watermelon, your mouth will
   become crooked.'

21.8.1.2. Participial clause with the postposition *edeisini* 'when, if'

A temporal clause with the temporal postposition *edeisini* 'when, if' (21.3.1.6)
can occasionally express a conditional meaning:

(1542) a. *Ča:la-i* *edeisini*   *ei* *moxo-lo*   *bi:*
    [want-PRP if]   this cup-LOC   be.PRP
    gampa-wa   *uniŋa-la.*
    porridge-ACC   spoon-V
    'If you agree, scoop the porridge which is in this cup.'

  b. *Si* *mantila-i* *edeisi* *bi* *bude-ze.*
    [you pour-PRP if] me die-SUBJ
    'If you pour (water on me), I might die.'

21.8.2. Counterfactual condition

In counterfactual (hypothetical) conditionals the matrix verb is in the
Conditional mood (7.5.4). The subordinate predicate is expressed by the
Irrealis Conditional Converb in the Past (1543a, b) or Present (1543c,d). Since

the Past Conditional Converb does not have personal forms, the subject of the subordinate clause must be overtly expressed, as distinct from other types of subordinate clauses.

(1543) a. *Aja*   *bi-muse*   *bi*   *xunazi:*   *jexe-i*
good   be-COND   [me   sister.1SG   sing-PRP
bi-si.
be-PAST]
'It would have been nice if my sister sang.'

b. *Nua-ni*   *oño-mu:i*   *bi-si*   *oño-muse.*
[he-3SG   write-DES.PRP   be-PAST]   write-COND
'If he had wanted to write a letter, he would have written it.'

c. *Si*   *ni-we-de*   *gele:*   *bi-si*
[you   who-ACC-IND   ask.PP]   be-PAST
sin-e-we   *belesi-du-muse.*
you-0-ACC   help-PL-COND
'If you had asked somebody, they would have helped you.'

d. *Si*   *e-si*   *tuŋala* *bi-si*   *bi*
[you   NEG-PAST   disturb be-PAST]   me
wa-muse-i   *käŋa-wa.*
kill-COND-1SG   deer-ACC
'If you hadn't disturbed me I would have killed a deer.'

If the subordinate clause contains the copular construction (such as those described in Chapter 17) the first component of the Past Conditional which corresponds to the verb *be-* 'be' is omitted. The Past Conditional Converb is expressed only by the unchangeable copular form *bisi*. Example (1544a) illustrates the copular subordinate clause construction with the noun as its component, example (1544b) the same construction with the Past passive participle, and example (1544c) the same with the adjective.

(1544) a. *Bi* *sun-zi*   *geje*   *ŋene-muse-i*
me you-INST   together   go-COND-1SG
ugda   *bi-si.*
[boat   be-PAST]
'I would have come with you, if I had had a boat.'

b. *Tege-we*   *uli-se*   *bi-si*   *sin-du*
[gown-ACC   sew-PP.PAS   be-PAST]   you-DAT
bu-muse-i.
give-COND-1SG
'If the gown had been sewn, I would have given it to you.'

c. *Eke-xi*   *bi-si*   *bi*   *eme-muse-i.*
[time-ADJ   be-PAST]   me   come-COND-1SG
'If I had had time I would have come.'

The Irrealis Necessitative Conditional Converb expresses an additional necessitative meaning.

(1545) a.
    Si   *nagda-zaŋa*   *bi-si*   *e-si:-de*
    [you   reach-FP   be-PAST]   NEG-PAST.2SG-FOC
    nagda.
    reach
    'You should have reached (the target), but you didn't.'

    b.
    Si   *oňo-u-zeŋe*   *bi-si*
    [you   write-PAS-FUT   be-PAST]
    oňo-muse-i.
    write-COND-1SG
    'If you had had to write it, you would have written it.'

    c.
    Bi Oloŋo-tigi   *j'e-we-de*   *nixe-zeŋe-i*
    me Olon-LAT   [what-ACC-FOC   do-FP-1SG
    bi-si   *ŋene-muse-i.*
    be-PAST]   go-COND-1SG
    'If I had had to do something (there), I would have gone to Olon.'

Sometimes in conditional sentences the main clause verb is in the Future or Necessitative.

(1546) a.
    Si   *amba-wa*   *wa:-i*   *bi-si*
    [you   evil.spirit-ACC   kill-PRP   be-PAST]
    memi   *wa-zaŋa-i.*
    REF.ACC   kill-FUT-2SG
    'If you kill an evil spirit, you will kill yourself.'

    b.
    Si tu   *ehi*   *nexe*   *bi-si*   *bi*   *anana*
    [you so   NEG   do   be-PAST]   me   long.ago
    ŋene-zeŋe   *bi-s'e-i.*
    go-FP   be-PERF-1SG
    'If you hadn't done this, I would have left long time ago.'
    (Schneider 1937: 82)

21.9. Concessive clauses

There is no specialized means to express the adverbial clause of concession. Other types of adverbial clauses such as the infinitival manner clause (21.1.4) often imply concessive meaning.

Chapter 22
Coreference

This chapter focuses on anaphoric phenomena, namely, pronominal anaphora (22.1), coreferential deletion (22.2), reflexivization (22.3), reciprocalization (22.4), and switch-reference (22.5).

22.1. Pronominal anaphora

In the majority of cases both the matrix verb and the verb in the subordinate clause exhibit agreement with the subject argument, at least in person (for details see 15.1.1.2). The pronoun that corresponds to the subject is therefore easily dropped (22.2). However, pronouns in other functions are normally overtly present in the clause, and, under certain conditions, the subject pronoun is also overt.

22.1.1. 3rd Person Personal pronouns

In this section we address the difference between the 3rd person Personal pronoun *nua-ni* 'he, she' and *nua-ti* 'they', on the one hand, and *bue-ni* 'he, she' and *bue-ti* 'they' on the other (see 9.1.1). Both types of pronouns refer only to human entities, but they play different roles in the process of maintaining coreference in the text. Both can be used cataphorically and anaphorically.

22.1.1.1. Pronouns *nuani* 'he, she', *nuati* 'they'

The pronouns *nua-ni/nua-ti* commonly serve as deictic pronouns. The example below shows the deictic pronoun *nua-ni* followed by the anaphoric pronoun *bue-ni* while both refer to the same entity.

(1547)	*Nua-ni*	*anana*	*min-tigi*	*gele:-ni*
	he-3SG	long.ago	me-LAT	ask.PAST-3SG
	kusige-we	*buen-du-ni*		*bu-o:-mi.*
	knife-ACC	he-DAT-3SG		give-PAST-1SG

'He has been asking for a knife from me for a long time, and I gave it to him.'

22.1.1.2. Pronouns *bueni* 'he, she', *bueti* 'they'

On the other hand, the pronouns *bue-ni/bue-ti* are only used anaphorically, their two main functions being anaphora to a non-topical element, and to a new (replaced) topic. In both cases the antecedent must be introduced in the previous context. The topic is roughly defined as an element the proposition is about (see Chapter 24). Universally, the topic is known to correlate with the grammatical relation of the subject and to have a high degree of continuity in the discourse. In Udihe, anaphora to the continuous topic in the subject role is expressed by the coreferential omission of the subject (22.2.1). A non-continuous topic naturally cannot be omitted. This explains why the pronouns *bue-ni/bue-ti*, which only refer to a non-topic or a non-continuous topic, are generally the only (non-contrastive) Personal pronouns overtly present in the texts.

22.1.1.2.1. Anaphora to non-topical elements

Anaphora to non-topical non-subject elements is possible with the pronouns *bue-ni/bue-ti* with regard to the animate antecedent, or *(u)ti* 'that' for the inanimate antecedent (22.1.2.2.1). In (1548) the anaphoric pronoun *bue-ni* functions as a non-subject argument or an adjunct, in (1549) as a possessive modifier.

(1548) a. *Pauza   ña:-zi-ni   Pakula   mamasa-ni*
           roe   skin-INST-3SG   Pakula   wife-3SG
           bue-du-ni   watuza-wa   uli-e-ni.
           he-DAT-3SG   home.shoes-ACC   sew-PAST-3SG
           'Pakula's wife has sewn home shoes for him from the roe's.skin.'

     b. *Bi   sa:-mi   omo   ni:-we   mamasa-ni*
         me   know-1SG   one   man-ACC   wife-3SG
         buen-digi-ni   sagdi.
         he-ABL-3SG   old
         'I know a man whose wife is older than he.'

     c. *Bi käŋa   xokto-wo-ni   ise:-mi*
         me deer   footstep-ACC-3SG   see.PAST-1SG
         bue-we-ni   e-si-mi   ise.
         he-ACC-3SG   NEG-PAST-1SG   see
         'I saw the footsteps of a deer, but I didn't see the deer itself.'

d. *Zeu-de*   *bie,*   *j'eu-j'eu*   *i:-ni*
    food-FOC   be.PRES.HAB   what-what   kind-3SG
    teu bie,   *nada*   *zali*   *tapči-de.*
    all be.PRES.HAB seven barn   full-FOC
    Bue-we-ni   *tene*   *ei-mi*   *ise.*
    he-ACC-3SG   CONT   NEG-1SG   see
    'There is food, there is everything, seven full barns. But I don't see him.'

e. *Bi*   *anda-i*   *e-si-ni*   *eme-gi.*
    me   friend-1SG   NEG-PAST-3SG   come-REP
    Bue-ni   *gäundani*   *etete-mi.*
    he-3SG   without   work-1SG
    'My friend didn't come. I am working without him.'

(1549) a. *Bue-ni*   *zakta*   *sile:-we-ni*   *pauza*   *dili-ni*
           he-3SG   millet   gruel-ACC-3SG   roe   head-3SG
           diga:-ni.
           eat.PAST-3SG
           The roe head ate his millet gruel.' (K 140)

b. *Petra*   *gada:-ni*   *kusige-we*   *Iwana-du*
    Peter   buy.PAST-3SG   knife-ACC   Ivan-DAT
    bue-ni   *zä:-ŋi-zi-ni.*
    he-3SG   money-AL-INST-3SG
    'Peter bought Ivan a knife with his (Ivan's) money.'

22.1.1.2.2. Anaphora to replaced topic

Examples (1550) represent the pronouns *bue-ni/bue-ti* referring to the replaced topic in the subject role. For example, in (1550a) the element that corresponds to the dropped subject of the first two clauses ('he') is the "old" topic replaced in the third clause *Beje-ti loxo bu-o:-ti* 'They gave him a saber'.

(1550) a. *Gida*   *bu-o:-ni.*   *E-si-n(i)-de*
           spear   give-PAST-3SG   NEG-PAST-3SG-FOC
           ise loxo. *Beje-ti*   *loxo*   *bu-o:-ti.*
           see saber. he-3PL   saber   give-PAST-3PL
           'He gave (them) a spear. He did not see a saber. They gave (him) a saber.' (K 176)

b. *Sebie*   *beje-ti*   *taŋa:-ti*   *jei*   *ni:*
    earlier   he-3PL   count.PAST-3PL   nine   man
    bi-fi   *guŋ-ki-ni.*
    be-1PL.IN   say-PAST-3SG

'Earlier, when they were counting themselves, they said: we are nine people.' (K 150)

c. *Bu-je*   *si*   *uta-wa.*   *Eiɣaŋkini*
give-IMP.2SG   you   that-ACC   soon
bu:-i   *edeisini*   *bue-ti*   *daga-zaŋa-ti*
give-PRP   when   he-3PL   burn-FUT-3PL
uta-wa.
that-ACC
'Give it (to them). As soon as you give (it to them), they will burn it.'

d. *Neŋu-ni*   *gulin-e-isi-ni*   *bue-ni-de*
younger.sibling-3SG   go-0-PC-3SG   he-3SG-FOC
xaisi   *titigi-e-se.*
also   dress-PP-FOC
'After her brother left, she also got dressed.'

e. *Bi*   *neŋu-i*   *o-du*   *ei-ni*
me   younger.sibling-1SG   this-DAT   NEG-3SG
bagdi   *bue-ni (*nua-ni)*   *Bali-le*
live   he-3SG   Khabarovsk-LOC
ñansule-ini.
study-3SG
'My younger brother (sister) does not live here, he (she) studies in Khabarovsk.'

The pronouns *bue-ni/bue-ti* may function as Reflexive pronouns when they refer to the new (replaced) topic (subject), but do not bear the subject role themselves. There are therefore in a complementary distribution with the regular Reflexive pronoun *men-e* (22.3.1) which is used only as a reflexive anaphor to the regular (non-replaced) topic. When the replaced topic is expressed by a lexical noun phrase (*exi-ni* 'the sister' in (1551)) and controls the possessive noun phrase within the same clause, the possessor is encoded by the pronoun *bue-ni/bue-ti*. However, the head of the Reflexive possessive noun phrase takes the regular Reflexive Possessive affixes.

(1551) *Eme-gi-e-ni*   *xaisi*   *exi-ni,*   *xai*   *ute*
come-REP-PAST-3SG   also   sister-3SG   also   that
eme-gi-e-ni   *bue-ni*   *neŋu-mi*
come-REP-PAST-3SG   he-3SG   younger.sibling-REF
zulie-ni.
before-3SG
'The sister also came, she also came before her brother.'

22.1.2. Demonstrative pronouns

Both the Demonstrative pronouns *ei* 'this' and *(u)ti* 'that' (9.4) can be used anaphorically, though their functions differ. These pronouns normally refer to inanimate objects and are the only way to refer back to an inanimate entity. Under certain conditions they may indicate living people as well. As mentioned in 9.4, they either act as modifiers or are substantivized and function as immediate constituents of the clause.

22.1.2.1. The pronoun *ei* 'this'

The anaphoric-deictic pronoun of the proximal deixis *ei* is uncommon in the anaphoric function, however it is not excluded completely.

22.1.2.1.1. Animate person reference

The anaphoric pronoun *ei* sometimes refers to an animate object. The examples below illustrate the anaphoric use of the pronoun *ei*, which refers to living persons.

(1552) *Ei   getu-we-fi*   *magi-kce-le:-mi*   *ceze*
       this PL-ACC-1PL.IN   kill-DES-PURP-SS   true
       emende kägampa-ni   *keje-n(i)*   *ceze:-m(i)*
       witch   liar-3SG   word-3SG   believe.PAST-1SG
       m'ei-de.
       only-FOC
       'I only believed the words of the witch liar, and wanted to kill them.'
       (K 183)

22.1.2.1.2. Situation reference

The pronoun *ei* can refer to the situation rather than to the object or person.

(1553) a.   *Egdeŋke*   *j'eu*   *bi:-ni*   *uti?*   *Ei*
           interesting   what   be-3SG   that   this
           guese   *zauŋa-wa*
           pike   greenling-ACC
           niŋme:-ni.
           swallow.PAST-3SG
           Interesting, what is that? It is that the pike has swallowed the greenling.'

b. *Egdeŋke.*   *Ei*   *Kanda mafa*   *sita-i*
    interesting   that   Kanda old.man   son-REF
    wa:-ni.
    kill.PAST-3SG
    'Interesting. It is that the old man Kanda killed his son.' (K 191)

22.1.2.2. The pronoun *(u)ti* 'that'

The pronoun *(u)ti* is the most frequent means of textual anaphora in Udihe. On
its resumptive use see 22.1.3.1. In the attributive function it equally refers to
animate and inanimate entities.

(1554) a. *Pakula*   *tene*   *bui-we*   *wa-laga-mi*
           Pakula   CONT   animal-ACC   kill-PURP-SS
           zu:gisi:-ni *tukca*   *tene*   *igbe:-ni*   *uti*
           aim-3SG   hare   CONT   frighten.PAST-3SG   that
           bui-we.
           animal-ACC
           'As soon as Pakula aimed at the animal to kill (it), the hare
           frightened the animal away.'
       b. *Ilekpe-sie*   *uti*   *xaŋa-ŋku-zi.*
           try-IM.PRP   that   guess-N-INST
           'He tried with that guessing stone.'
       c. *In'ei*   *pauza-wa*   *ise:-ni*   *ila*   *in'ei.*
           dog   roe-ACC   see.PAST-3SG   three   dog
           Uti in'ei *xente-ni*   *emuse* *a:nta* *bi-si-ni.*
           that dog   master-3SG   one   woman be-PAST-3SG
           'The dogs saw the roe, three dogs. The master of those dogs was a
           certain woman.' (K 138)

Below we address its use in the substantivized function.

22.1.2.2.1. Inanimate object reference

Anaphoric pronouns of the series *(u)ti* mostly refer to inanimate objects, for
example:

(1555) a. *Bi*   *ta:mati*   *zueze-we*   *gada:-mi.*
           me   last.year   table-ACC   buy.PAST-1SG
           Uligdig'a   *bi-s'e*   *uti.*
           beautiful   be-PERF   that
           'Last year I bought a table. It was beautiful.'

b. *Ei zugdi-we   go:-zi   wo:-ti,*
    this house-ACC   long-INSTR   make.PAST-3PL
    uta-wa   bi   abuga-i   wo:-ni.
    that-ACC   me   father-1SG   make.PAST-3SG
    'It took a long time to build this house; my father built it.'

c. *Uta-digi   boxoso   seŋmi   gakpa:-ni*
    that-ABL   humpback   arbalest   shoot.PAST-3SG
    uta-wa   agaŋ-ki-ni.
    that-ACC   step.over-PAST-3SG
    'Then the humpback shot an arbalest and she stepped over it.'
    (K 173)

This pronoun in local case forms commonly serves as an anaphoric adverbial
('there'). The antecedent is found within the same clause (1556) or in the
closest left context (1557).

(1556) a. *Komo   uta-du   bi:-ni   joxo*
           Komo   that-DAT   be-3SG   pot
           xegie-le-ni.
           under-LOC-3SG
           'Komo is there, under the pot.' (K 150)

b. *Sagdi   xoto   t'aŋki-le-ni   sagli*
    big   city   middle-LOC-3SG   big
    zugdi-le   ila   afikta zugdi
    house-LOC   three   store   house
    uta-la   bagdi-e-ni   Udie   waŋza-ni.
    that-LOC   live-PAST-3SG   Udihe   tsar-3SG
    'In the middle of a big city, in a large house, a three storied one,
    there lived the Udihe tsar.' (K 138)

(1557) a. *Ule:-ni   agdu   uta-la*
           dig.PAST-3SG   hole   that-LOC
           ŋua-waŋ-ki-ni.
           sleep-CAUS-PAST-3SG
           'He dug out a hole and put them to sleep there.' (K 132)

b. *Pakula   ba:-za   ge-tigi-ni*
    Pakula   place-N   surface-LAT-3SG
    ŋene:-ni.   Uta-la   ketu   iŋeni.
    go.PAST-3SG   that-LOC   very   cold
    'Pakula went to the forest. It is very cold there.'

c. *I:-le-de   mamasa-na-mi   saŋu-ini*
    what-LOC-IND   wife-DEST-REF   choose-3SG
    omo   jegdige,   uta-uxi   ŋene-u.
    one   hero   that-LAT   go-1PL.EX

'A hero is choosing a wife somewhere, and we are going there.'
(K 171)

22.1.2.2.2. Animate person reference

Although living persons are usually referred by the pronouns *bue-ni/bue-ti* in texts (22.1.1.2), the Demonstrative pronoun *(u)ti* 'that' also performs this function. Examples (1558) illustrate the use of the pronoun *(u)ti* referring to the animate object.

(1558) a. *Uti aja-zi   ise-si:-ni.*
            that good-INST   see-IM-3SG
            'He is looking well.'

     b. *Bi   uti   getu-we   säta   saki-nde-ze-mi,*
            me   that   PL-ACC   strong   clap-INST-3SG
            wa-zaŋa-i   bi   uti   aziga-wa.
            kill-FUT-1SG   me   that   girl-ACC
            'I will strike them strongly, I will kill those girls.'

The pronouns *bue-ni/bue-ti* and *(u)ti* are sometimes interchangeable. They are equally permissible when referring to animals, cf. (1560a) and (1560b).

(1559) *Ei   a:nta   bie,   uti / beje-ni   zugdi-di-ni*
        this woman   be.PRES.HAB   that / he-3SG   house-DAT-3SG
        bagdi-mi.
        live-1SG
        'This is that woman, I live in her house.'

(1560) a. *Bi činda   dian-a-i-we-ni   dogdi-e-mi*
            me bird   say-0-PRP-ACC-3SG   hear-PAST-1SG
            bue-we-ni   e-si: ise.
            he-ACC-3SG   NEG-PAST.1SG   see
            'I heard a bird singing but did not see it.'

     b. *I:-le   si   imexi   in'ei?   Bi   ali-de*
            what-LOC   you   new   dog.2SG   me   when-IND
            e-si: ise   uta-wa.
            NEG-PAST.1SG   see   that-ACC
            'Where is your new dog? I have never seen it.'

22.1.2.2.3. Situation reference

The anaphoric pronoun *(u)ti* can refer to situations as well, that is, to a piece of the text. This is illustrated in (1561), where *uti getu* substitutes for human participants, and *uti* refers to an event.

(1561) *Uti   getu   uti   nixe:-ti   bi:-ti.*
      that   PL   that   do.PP-3PL   be-3PL
      'They did it (themselves).' (K 198)

22.1.2.3. Anaphoric adverbial expressions

Various forms of the Demonstrative *(u)ti* serve to link a clause to a preceding discourse. The Nominative form co-occurs with postpositions and adverbials, which gives rise to fixed adverbial expressions (1562a). Some oblique cases are used as regular discourse linkers (1562b). In addition, the stem *(u)ta-* is the base for several anaphoric adverbs and adjectives (1562c).

(1562) a.   *(u)te bede, ute be*   'in the same way, so'
            uti amä:la-ni   'after that'
            uti agdandi-ni   'during that time, then'
            ti: emne   'once, one day'
     b.   *uta-wa* (ACC)   'then'
            uta-di(gi) (ABL)   'since, after'
            ute-li (PROL)   'then'
     c.   *uta-mi*   'so, that is why'
            ute-be   'so'
            uta-liŋeni   'then'
            ute-fi   'of that kind'
            uta-(m)du   'later, after'
            ut'a-si   'later, after'
            ute-befi   'the same, such'

The adverbs *uta-mi* and *ut'a-si* seem to go back morphologically to verbal forms, the Infinitive, and the Perfective same-subject converb respectively, as well as the form *uta-di-ge-si* 'since then' (SK 463) with an unclear element *-di-*. This suggests that the demonstrative stem *uta-* may have had a verbal representation in the past. *Uta-digi* is the Ablative form of the anaphoric pronoun, while *ute-fi* is derived with the adjectival suffix *-fi* (6.4.1.3.1). The morphological form of the other anaphoric adverbs is not so transparent. Other anaphoric expressions derived from the same base by means of the participial forms of the copula verb 'be' are: *ute bi:* 'such', and *ute bie* 'such'.

    Anaphorical expressions based on the Demonstrative *ei* are in (1563).

(1563) *ei*   'now'   *ei-ze*   'all the time'
       eiganjkini 'now; as early as now'   *ei dexi*   'till now'
       (a-wa) caixi 'since this day'   *ei zulieni* 'formerly'

Examples:

(1564) a.   *Nua-ni*   *utebe-fi*   *uga-ni.*
            he-3SG   so-ADJ   voice-3SG
            'He has such a voice.'
       b.   *Bi-de*   *xai(si)* *utelinjeni*   *nenji-ni*
            me-FOC   also   then   day-3SG
            njene:-mi.
            go.PAST-3SG
            'I left on the same day too.'
       c.   *Utemi*   *konjo-mi.*
            therefore   get.thin-1SG
            'That is why I am getting thinner.'
       d.   *Tinenji*   *omo*   *mafasa*   *min-e-we*
            yesterday   one   old.man   me-0-ACC
            ute bede   *cemne:-ni.*
            that like   deceive.PAST-3SG
            'Yesterday an old man deceived me in the same way.'
       e.   *Anana*   *bu*   *e*   *bede*   *wo:-i*   *bi-s'e.*
            before   we   this   like   do-PRP   be-PERF
            'Before, we used to do it like this.'

22.1.3. Correlatives

Correlatives are not common in Udihe, and only appear in certain marginal
constructions.

22.1.3.1. Correlative relative clause

The correlative relative clause does not seem to be a native Udihe construction,
and is used infrequently. The anaphoric pronoun *(u)ti* occurs in the
superordinate clause.

(1565) a.   *Min-du*   *ise-wen-e-je*   *uti*
            me-DAT   see-CAUS-0-IMP.2SG   that
            ni:-we   *kuti-we*   *wa:-ma-ni.*
            man-ACC   tiger-ACC   kill.PP-ACC-3SG
            'Show me the man who killed the tiger.'

b. *Tineŋi*　*eme-i*　　　*getu-we*　　*uti*
　　yesterday　come-PRP　　PL-ACC　　that
　　getu-we　*bi*　*ise:-mi.*
　　PL-ACC　　me　see.PAST-1SG
　　'I saw those who came yesterday.'

22.1.3.2. Equative correlatives

Other correlative structures correspond semantically to equative constructions.
The dependent clause predicate may be expressed with the Infinitive or, less
frequently, the finite verb. Either the same interrogative pronoun is used both in
the subordinate and superordinate clause (1566), or the interrogative pronoun
of the dependent clause corresponds to the same morphological form of the
anaphoric pronoun *(u)ti* within the main clause (1567). On the finite correlative
equative relative clause see 18.3.2.2.

(1566) a.　*Adi*　　　*ni:*　　*bi-mi*　　　*adi-ma*
　　　　[how.many　man　be-INF]　　how.many-ACC
　　　　wo:-iti.
　　　　make-3PL
　　　　'They make as many (of them) as there are people.' (K 123)
　　c.　*Ni*　　　*ča:la-mi*　　*ni*　　*uniŋa-la.*
　　　　[who　　want-INF]　　who　　spoon-V
　　　　'He who wants (to do it) may scoop with the spoon.'
　　d.　*Ni*　　　*galakta-mi*　　*ni*　　*b'a.*
　　　　[who　　seek-INF]　　who　　find
　　　　'He who seeks, finds.'

(1567) *Ni:*　　*ca:i-la*　　*xetigene-mi*　　*uti*　　*ete-ini.*
　　　　man　　far-LOC　　jump-INF　　　that　　win-3SG
　　　　'Who jumps further, wins.' (SK 600)

22.2. Coreferential deletion

Coreferential deletion is typical of the subject and less so of the direct object.
Other grammatical relations undergo coreferential deletion only sporadically. A
nominal head may undergo deletion under identity with the previously
mentioned element, which results in headless structures. Verbs and verbal
phrases undergo elliptical deletion.

22.2.1. Subject deletion

22.2.1.1. Pronoun-drop

Personal pronouns in the subject role are regularly omitted, while agreement affixes cross-reference their antecedent (15.1.1.2).

(1568) a.   *Soŋo-u.*
             cry-2PL
             'You are crying.'
       b.   *I:-zi*   *tamafi-zeŋe-i?*
             what-INST   pay-FUT-2SG
             'With what will you pay?'

The subject is overt when it introduces a new participant within a presentational contraction (see 24.1.2.2), when it is anaphoric but corresponds to the new topic (22.1.1.2.2), or when it is contrastive (1569).

(1569) a.   *– Bi-ke*   *e-zeŋe-i*   *menze. –*   *Bi*   *bi*
             me-FOC   NEG-FUT-1SG   stay   me   me
             bi   *timana-ni*   *bi*   *menze-mi,*   *bi*
             me   tomorrow-3SG   me   stay-1SG   me
             digen-zeŋe-i.
             hide-FUT-1SG
             '– I won't stay (at home). – Me, me, me, it is me who will stay tomorrow, I will hide.' (K 105)
       b.   *Si,*   *mamasa-ti,*   *geh-i,*   *si*   *wa-h-i*
             you   wife-3PL   bad-2SG   you   kill-PAST-2SG
             sita-fai.
             child-REF.PL
             'It's your fault, wife, you killed our son.' (SK 259)

22.2.1.2. Coreferential deletion across the conjoint clauses

The Nominative subject controls coreferential deletion across the conjoint clause, which is one of its definitional properties (15.1.1). Section 18.1.2.1.3 provides examples of coordinated structures with a shared subject. Another example is presented below.

(1570) a.   *E-zi*   *wanta*   *to:-wo,*   *zegde-i*   *dele.*
             NEG-IMP.2SG   touch   fire-ACC   burn-2SG   FOC
             'Don't touch the fire, (because) you will burn yourself.'

b.   *Ca:i-la*   *te-je,*   *aka-i*   *daga-i.*
     far-LOC   sit-IMP.2SG   back-REF   burn-2SG
     'Sit father (from the fire), (because) you will burn your back.'
     (SK 268)

When the subject of the first clause does not correspond to the agent argument
of the second conjunct, but to the patient, passivization is the result. The
subject coreference is so maintained and the second clause subject is
coreferentially omitted, cf.:

(1571) a.   *Buk-ki-ni*   *Uʐa-la,*   *kalima-du*
            die-PAST-3SG   Uʐa-CONT   whale-DAT
            xuktu-w-o:-ni.
            carry.away-PAS-PAST-3SG
            'Uʐa died (because) the whale carried him away.' (K 114)

b.   *Ba:-ʐa*   *ge-tigi-ni*   *e-zi*   *ŋene*
     place-N   surface-LAT-3SG   NEG-IMP.2SG   go
     soŋo-du   *dig-u-i*   *dele.*
     bear-DAT   eat-PAS-2SG   CONT
     'Don't go to the forest, otherwise a bear will eat you.'

c.   *Gos'o,*   *e-zi*   *eme,*   *Čouxi Mä:tu-du*
     uncle   NEG-IMP.2SG   come   Chouxi Mjatu-DAT
     u:-ze-i.
     kill.PAS-SUBJ-2SG
     'Uncle, don't come (here), (because) Chouxi Mjatu will kill you.'
     (SKX 156)

d.   *Ba:-ʐa*   *ge-tigi-ni e-zi*   *ŋene,*
     place-N   surface-LAT-3SG   NEG-IMP.2SG
     soŋgo-du   *dig-u:-i.*
     go bear-DAT   eat-PAS-2SG
     'Do not go into the wood, (otherwise) you will be eaten by the
     bear.'

e.   *E-uxi*   *ŋene-je,*   *abuga-du-i*
     this-LAT   come-IMP.2SG   father-DAT-2SG
     gel-u-i.
     call-PAS-2SG
     'Come here, your father calls you.'

f.   *E-zi*   *ŋene*   *uta-du*   *wa-u-i.*
     NEG-IMP.2SG   go   that-DAT   kill-PAS-2SG
     'Don't go, he will kill you.'

Although coreferential omission of the direct object is acceptable (22.2.2), the
referential null cannot be controlled by the direct object of the first conjunct.
When the first clause object corresponds to the participant who performs the

action described by the second conjoint clause, the latter is causative. For
further information on the Causative construction see 16.1.3. Consider (1572),
where the direct object of the first clause corresponds to the causee argument of
the second conjunct (encoded as the direct object Accusative noun phrase).

(1572) a. *Min-e-we*   *e-zi*   *casi,*   *min-e-we*
      me-0-ACC   NEG-IMP.2SG   tickle   me-0-ACC
      atana-wan-a-i-de.
      suffocate-CAUS-0-2SG-FOC
      'Don't tickle me, (because) I will suffocate.'

    b. *E-zi*   *casi,*   *bude-wen-e-i-de.*
      NEG-IMP.2SG   tickle   die-CAUS-0-2SG-FOC
      'Don't tickle (me), (because) I will die.'

    c. *E-zi*   *koŋko,* *soŋo-won-o-i-de.*
      NEG-IMP.2SG   beat   cry-CAUS-0-2SG-FOC
      'Don't beat (him), (because) he will cry.'

    d. *Mama*   *od'o*   *e-zi-u*
      grandmother   grandfather   NEG-IMP-2PL
      kuŋede,   *bude-wen-e-u dele.*
      pour   die-CAUS-0-2PL CONT
      'Grandmother, grandfather, don't pour (water on him), you will
      destroy him.'

    e. *Susa-gi-ze-mi*   *bi*   *lä*
      escape-REP-SUBJ-1SG   me   very
      uktu-wen-zeŋe   *tigde.*
      wet-CAUS-FUT   rain.
      'I must escape, (otherwise) the rain will make (me) wet through.'

The opposite strategy to maintain subject coreference in this case is
passivization of the second clause, cf.:

(1573) *E-zi*   *wende-le*   *suese-we,*   *aja*
     NEG-IMP.2SG   throw-SING   axe-ACC   nice
     aisi-gi-u-zeŋe.
     mend-REP-PAS-FP
     'Don't throw away the axe, it can be mended well.'

22.2.1.3. Subject deletion in the subordinate clause

Elements other than subjects typically do not control coreferential null in the
embedded clause, cf. the following example where the embedded clause
subject corresponds to the oblique element *eniŋe-tigi:* 'to my mother' within
the matrix clause and must be replaced by the anaphoric pronoun *uti* 'that'.

(1574) *Ge*   *eniŋe-tigi:*   *ŋene-ze-fi*   *(u)ti*
         well   mother-LAT.1SG   go-SUBJ-1PL.IN   that
         ise-le(ge)-ni.
         see-PURP-3SG
         'Well, let us go to my mother so that she could have a look (at you).'

22.2.1.3.1. Complement and adverbial clause

The coreference relationships between the elements of the superordinate clause and the subject of the non-finite subordinate clause are largely regulated by the switch-reference system (22.5). In same-subject converbial structures the overt presence of the subject in certain subordinate clauses is strictly ungrammatical, since the same-subject switch reference markers unambiguously indicate the identity of the subject participant. This also applies to those subordinate clauses where the morphological form of the predicate itself necessarily presupposes the same-subject relationship, namely subordinate clauses with the Infinitive (22.5.1.3). However, in same subject clauses based on participles (complement and adverbial clauses) the subject may be replaced by the Reflexive Nominative pronoun *men-e*, as shown in 22.2.1.3.

In different-subject subordinate clauses, the omission of the subject basically follows the same regularities as in superordinate clauses (22.2.1.1). Deletion of the subordinate subject is illustrated below for the complement clause (1575), and the adverbial purpose clause (1576). It occurs under coreference with previously mentioned participants, or certain elements of the superordinate clause (other than the subject).

(1575) a.   *Ge*   *utebe*   *ikteme-si:-we-ni*   *uti alasi:.*
              well   so   gnaw-IM.PRP-ACC-3SG   that wait.PRP
             'Well, so he is waiting (for him) gnawing.'
      b.   *Casi:-we-ni*   *xeti-si:-we-ni*   *ei*
              tickle.PRP-ACC-3SG   scratch-IM.PRP-ACC-3SG   NEG
             dogdi.
             hear
             'He does not hear (them) tickling and scratching (her).'

(1576) *Ge*   *eniŋe-tigi:*   *ŋene-ze-fi*   *eniŋe*
         well   mother-LAT.1SG   go-SUBJ-1PL.IN   mother
         ise-lege-ni.
         see-PURP-3SG
         'Well, let us go to my mother so that she can take a look.'

For most subordinate clauses there do not seem to be any restrictions on the potential controller. Certain special control structures of complement clauses

(subject control, object control, Dative control) are described in Chapter 20. The subject control ("same-subject") and Dative control clauses demonstrate obligatory subject drop under; however, in object control clauses the overt subject in the subordinate clause is not excluded:

(1577) *Min-e-we*   *mudousi:-ni*   *bi*   *e-lege-i*   *w'ali.*
       me-0-ACC   persuade-3SG   me   NEG-PURP-1SG   fight
       'He is persuading me not to fight.'

22.2.1.3.2. Relative clause

Although the switch reference system is operative for the relative clauses as well, and the relative clause predicate takes the subject agreement affixes, the coreferential omission of the relative clause subject is considerably less frequent than for the other types of subordinate clause. In different-subject structures even the pronominal subject is normally overtly present.

(1578) a.   *Oño-jo*   *ŋimaŋku-we*   *bi*   *ŋimasi:-we-i.*
            write-IMP.2SG   tale-ACC   me   tell.PRP-ACC-1SG
            'Write down the tale I am telling.'
       b.   *Si*   *tineŋi*   *sugdä:-wa*   *aki-e-me-i*
            you yesterday   fish-ACC   catch-PP-ACC-2SG
            zauŋa-zi   *gegbisi:-ti.*
            greenling-INST   call-3PL
            'The name of the fish you caught yesterday is greenling.'

Only in same-subject structures must the relative clause subject be either absent from the clause or be replaced by the independent Reflexive pronoun *men-e* 'oneself'.

(1579) a.   *Guliŋi-li-e-ni*   *men-e*   *ba:-tigi*
            go-INC-PAST-3SG   REF-0   place-LAT.REF
            men-e   *bi:-tigi.*
            REF-0   be.PRP-LAT.SS
            'He started preparing to go to his own place, to the place where he used to be.' (K 141)
       b.   *Sita-fai*   *tatusi-e-ti*   *men-e*
            child-REF.PL   teach-PAST-3PL   REF-0
            ñoni:-fei.
            can.PRP-SS.PL
            'They taught their children what they could do themselves.'
            (SK 648)

Note that this pronoun is never used in same-subject sentences where the head noun is also the subject of the superordinate clause.

22.2.2. Object deletion

Object deletion is far less regular than deletion of the subject (22.2.1). It can be conditioned by the situation of speech, as in (1580), or motivated by an anaphoric relationship within the text, as in (1581). The coreferential dropping of the object pronoun is indicated by brackets in the translations.

(1580) a. *Min-du*   *ise-wen-e-je.*
           me-DAT   see-CAUS-0-IMP.2SG
           'Show (this) to me.'
      b. *Timana*   *dogbo-ni*   *zawa-zaŋa-i*   *bi.*
          tomorrow   night-3SG   take-FUT-1SG   me
          'Tomorrow night I will catch (it).' (K 144)

(1581) a. *Zogbo-i*   *zawa-mi*   *zoŋčili-e-ni.*
           harpoon-REF   take-INF   throw-PAST-3SG
           'Having taken the harpoon, he threw (it).'
      b. *Uta-digi*   *jegdige*   *isesi:-ni*   *joxo*   *kumtes'e*
          that-ABL   hero   see-3SG   pot   turn.PERF
          gune.   *Uta-digi*   *nientile:-ni*   *jegdige.*
          EV   that-ABL   open.PAST-3SG   hero
          'Then the hero sees that the pot had turned over. Then he opened it.' (K 150)
      c. *A:-iti*   *nada*   *kotoi-ziga.*   *Nada*   *silikte*
          pursue-3PL   seven   bald-PL   seven   worm
          ede:-ti,   *ele*   *ele*   *buono-i.*
          become.PAST-3PL   soon   soon   catch-PRP
          'Seven bald men pursued (her). They turned into seven worms, and nearly caught up (with her).'
      d. *Zaŋdalafu*   *eme-gi:-si-ni*   *k'aiŋku*
          Zandalafu   come-REP-PC-3SG   brake
          do-lo-ni   *kepte-we-je.*
          inside-LOC-3SG   lie-CAUS-IMP.2SG
          'When Zandalafu returns, put (him) in a (leather) brake.' (K 106)

22.2.3. Headless noun phrases

Most modifying expressions can be used either attributively or independently; in the latter case they form headless noun phrases. Headless noun phrases are

fairly frequent. They result from the omission of the head nominal and the substantivization of the modifier, which receives some head properties and inflects for case, number, and possession. The following modifiers occur in headless relative clauses: (i) adjectives; (ii) Cardinal numerals; (iii) pronominal adjectives (namely, demonstrative pronouns, examples can be found in Chapter 9); (iv) scalar quantifiers *egdi* 'many, much, a lot' and *wac'a* '(a) little, (a) few'; (v) the universal quantifier *teu* 'all', (11.2.2.1); (vi) Possessive pronouns (9.1.4); (vii) relative clauses (headless relative clauses are treated in 19.5).

The nominalized modifier takes the collective Plural bound word *getu* instead of the regular nominal Plural marker -*ziga* (4.1.2.2), for example *baja getu* 'the rich ones', *uti getu* 'those, they', *egdi getu* 'many (of them). The former is compatible with the adjectival Plural marker -*ŋku*, cf.: *sagdä-ŋku-getu* 'the large ones' <large-PL-PL>. It inflects for case and possession in a regular way.

22.2.3.1. Coreferential omission of the head noun

The omission of the head noun normally happens under identity with another noun overtly present within the same clause or in the closest left context. In (1582) we illustrate the headless noun phrase with the substantivized adjective, and in (1583) with the substantivized Possessive pronoun.

(1582) *Kuŋgede-je   sagdi   cuanza-la   ic'a-la   uli   anči.*
       pour-IMP.2SG   large   kettle-LOC   small-LOC   water no
       'Pour from the big kettle, in the small one there is no water.'

(1583) a. *Si   bi   zugdi-du-i   bagdi: bi*
          you   me   house-DAT-2SG   live.2SG   me
          siniŋi-le.
          yours-LOC
          'You live in my house, and I live in yours.'
     b. *Ei   bi   oloxi-ŋi:,   ti: tene   siniŋi.*
          This   me   squirrel-AL.SG   that   CONT   yours
          'This is my squirrel, that is yours.'

In some cases the substantivized adjective is an apposition to the full noun phrase.

(1584) *Bua   xuen-dile-ni   uligdig'a-wa,   men-e ise-i:*
       place surface-LOC-3SG   beautiful-ACC   REF-0 see-PRP.SS
       ka:la-wa   tu: zawa-iti   boboi   gun-e-mi.
       thing-ACC   all   take-3PL   talisman   say-0-INF

'In the forest they take all things they see, all beautiful ones, and call them talisman.' (SKX 312)

22.2.3.2. Situationally motivated omission of the head noun

The omission of the head noun is often motivated not by a coreferential relationship, but by direct extralinguistic indication:

(1585) a.   *Sagdä-ŋku-we*   *pug'a*   *nodo-jo.*
         large-PL-ACC   separately   put-IMP.2SG
         'Put the large ones apart (of potatoes).'

     b.   *Bi   abuga-i*   *di:-me*   *diga-zeŋe-ni.*
         me   father-1SG   four-ACC   eat-FUT-3SG
         'My father will eat four (of them).'

     c.   *Min-du*   *gili-we*   *bu-je*
         me-DAT   cold-ACC   give-IMP.2SG
         'Give me some cold (water).'

     d.   *Egdi-me*   *diga!*
         much-ACC   eat
         'Eat a lot (of it).'

     e.   *Ic'a-ŋku-de*   *bie*   *sagdä-ŋku-de*
         small-PL-FOC   be.PRES.HAB   big-PL-FOC
         bie.
         be.PRES.HAB
         'There are small ones and large ones as well (of potatoes).'

     f.   *Meni-ŋi-di-fi*   *bu-je-u.*
         REF-AL-DAT-REF.PL   give-IMP-2PL
         'Give (it) to yours (to your dogs).'

     g.   *Meni-ŋi-fi*   *dalusi-je-u.*
         REF-AL-REF.PL   feed-IMP-2PL
         'Feed yours (your dogs)'.

22.2.3.3. Non-coreferential omission of the head noun

The head of the noun phrase may be omitted when it is not referential but its identity can be unambiguously understood from a general knowledge of the world. The adjective may be adverbialized in this case.

(1586) a.   *Bi   ei-mi*   *ča:la*   *guači-we*   *bi*
         me   NEG-1SG   want   bitter-ACC   me

         zei-we   *aju:-mi.*
         sweet-ACC   like-1SG
         'I don't want bitter, I like sweet (food).'

b. *Nua-ti*   *wac'a-ma*   *wa:-ti.*
     he-3PL   little-ACC   kill.PAST-3PL
     'They killed few (animals).'

c. *Bi niŋka-zi*   *wac'a-ma*   *egze-mi.*
     me Chinese-INST little-ACC   understand-1SG
     'I understand little Chinese.'

d. *Nua-ni*   *egdi-me*   *etete-ini.*
     he-3SG   much-ACC   work-3SG
     'He works a lot.'

e. *Keige*   *ñamai-we*   *galakta-ini.*
     cat   warm-ACC   seek-3SG
     'The cat seeks warmth.'

f. *Bi men-e*   *zele-i*   *bagdi-e-mi*
     me REF-0   life-REF   live-PAST-1SG
     aja-wa-da   *ge:-we-de.*
     good-ACC-FOC   bad-ACC-FOC
     'I have experienced good and evil in my life.'

g. *Iŋini-tigi*   *läs(i)*   *suñäli-e-mi*   *bi.*
     cold-LAT   very   tremble-PAST-1SG   me
     'I was trembling very much with the cold.'

The independent use of the universal quantifier *teu* (11.2.2.1.2) is basically conditioned by the same principle.

22.2.4. Predicate dropping

In (1587) we illustrate an ellipsis of the verb which is immediately recoverable from the linguistic context. The usual answer to a *wh*-question consists only of a questioned constituent in a fully inflected form (1587b). Examples (1588) present an instance of colloquial speech where all the verbs are omitted, so that the predicative functions seem to be fulfilled by adverbial expressions.

(1587) a. *Uta-digi*   *ñugi-e-ti*   *od'oko*   *ñoxoli*
        that-ABL   go-PAST-3PL   old.man   first
        mamaka   *amä:za-li.*
        old.woman after-PROL
        'Then they went out: the old man in front, the old woman behind.'
        (K 158)

b. *Si   j'e-we   wo-zoŋo-i?   Ugda-wa.*
you what-ACC   make-FUT-2SG   boat-ACC
'What will you make? A boat.'

(1588) a. *E: zegdem   guasa   i:mi   to:*
INTER   burnt   bitch   why   fire
kä:-ni-de   dili-de.
side-3SG-FOC   far-FOC
'Hey, burnt bitch, why (are you) close to the fire, (go) further.'
(K 109)

b. *Anda,   kä:-la-da,   kä:-la-da,*
friend   near-LOC-FOC   near-LOC-FOC
gun-e-mi.
say-0-INF
'Friend, nearer (to the fire), nearer, he said.'

Verbs easily undergo ellipsis under negation, when the content verb is omitted and the negative verb alone bears the predicative function.

(1589) a. *Si   eme-zeŋe-i?   E-zeŋe-i.*
you come-FUT-2SG   NEG-FUT-1SG
'Will you come? I won't.'

b. *Safani:,   e-zeŋe-i,   oŋmo:-mi.*
boring   NEG-FUT-1SG   forget.PAST-1SG
'Enough, I won't (tell), I forgot.'

c. *E-zeŋe-i,   guŋ-ki-ni.*
NEG-FUT-1SG   say-PAST-3SG
'I won't, he said.' (SKX 164)

22.3. Reflexivization

Formally, reflexivization is expressed by means of the Reflexive pronoun *men-* (9.2) or Reflexive Possessive affixes (4.1.4.2). Examples of these two cases are presented in sections 22.3.1.1 and 22.3.1.2 respectively. The ordinary personal pronouns and possessive affixes are not used in the reflexive function. There are no specialized verbal reflexive affixes. Reflexive markers indicate that the corresponding element is coreferential with another element, its antecedent. This element is unambiguously identified as the subject (cf. 15.1.1). The syntactic conditions on reflexivization are addressed in more detail in sections 22.3.2 and 22.3.3.

22.3.1. Reflexive elements

22.3.1.1. Reflexive pronouns

As mentioned in 9.2, Reflexive pronouns have Singular and Plural forms. Below we illustrate Reflexive pronouns in argument and adverbial positions in the Accusative (1590), the Locative (1591), the Instrumental (1592), and the Destinative (1593).

(1590) a. *Ei   ñ'aula   me-mui   men-e   mäunda-zi:*
            this guy   REF-ACC   REF-0   gun-INST.REF
            wa:-ni.
            kill.PAST-3SG
            'This guy killed himself with his own gun.'

     b. *Bue-ni   me-mui   ei-ni   aju.*
         he-3SG   REF-ACC   NEG-3SG   like
         'He does not like himself.'

     c. *Nua-ti   mefei   ei-ti   aju.*
         he-3PL   REF.ACC.PL   NEG-3PL   like
         'They don't like themselves.'

(1591) *Nataša   men-dile-i   bi:-ni.*
       Natasha   REF-LOC-SG   be-3SG
       'Natasha is at her place.'

(1592) *Bi   men-zi: geje   xebu-si-mi   c'o*
       me   REF-INST   together   take-IM-1SG   most
       aja-ni   in'ei-we.
       nice-3SG   dog-ACC
       'I take the best dog for myself.'

(1593) a. *Bi   men-di-ne-mi   ule:-we*
            me   REF-DAT-DEST-REF   meat-ACC
            gada:-mi.
            bring.PAST-1SG
            'I bought some meat for myself.'

     b. *Su   men-di-ne-fei   j'e-we*
         you   REF-DAT-DEST-PL   what-ACC
         ga:zi-e-u?
         buy-PAST-2PL
         'What did you buy for yourself?'

c. *Bu   ñö: ña:-wa-ni*
   we.EX   sable   skin-ACC-3SG
   men-di-ne-fi   *wa:-mu.*
   REF-DAT-DEST-REF.PL   kill.PAST-1PL.EX
   'We got the sable skins for ourselves.'

22.3.1.2. Possessive Reflexive affixes

Coreference of the possessive modifier with the subject is encoded with Possessive Reflexive affixes (4.1.4.2). The modifier itself can be expressed by the Nominative form of the Reflexive pronoun *men-e*, as in examples (1594), although this is not obligatory (1595).

(1594) a. *Bi   men-e   in'ei-zi*   *ŋene:-mi.*
          me   REF-0   dog-INST.REF   go.PAST-1SG
          'I was walking with my dog.'
      b. *Nua-ti   men-e   in'ei-zi-fi*   *ŋene-iti.*
          he-3PL   REF-0   dog-INST-REF.PL   go-3PL
          'They are walking with their dog.'
      c. *Ñ'aula-ziga   men-e   abuga-fi*
          child-PL   REF-0   father-REF.PL
          muisi:-ti.
          think-3PL
          'Children are thinking about their (own) father.'

(1595) a. *Bi   tineŋi   nodo:-mi*   *kusige-i.*
          me   yesterday   lose.PAST-1SG   knife-REF
          'I lost my knife yesterday.'
      b. *Ñ'aula-ziga   in'ei-fi*   *koŋko-iti.*
          child-PL   dog-REF.PL   beat-3PL
          'The boys beat their (own) dogs.'

22.3.2. Reflexive object

The possessive reflexive noun phrase in the object function is not marked by the morphological Accusative; that is, the Nominative and the Accusative are homonymous. This seems to be conditioned by economy considerations: the reflexive marking on the object noun phrase unambiguously indicates that this noun phrase itself cannot correspond to the subject role. Therefore, there is no need to disambiguate between the subject and the direct object by means of a special morphological device. Cf. examples (a) with the reflexive non-Accusative object and (b) with the regular Accusative object.

(1596) a.   *Nua-ni*   *(men-e)*   *sita-i*   *ise:-ni.*
        he-3SG   (REF-0)   son-REF   see.PAST-3SG
        'He$_i$ saw his$_i$ son.'

     b.   *Nua-ni*   *sita-wa-ni*   *ise:-ni.*
        he-3SG   son-ACC-3SG   see.PAST-3SG
        'He$_i$ saw his$_j$ son.'

(1597) a.   *Bue-ni*   *teluŋu-si:-ni*   *(men-e)*   *in'ei.*
        he-3SG   story-V-3SG   (REF-0)   dog.REF
        'He$_i$ is talking about his$_i$ dog.'

     b.   *Bue-ni*   *teluŋu-si:-ni*   *bue-ni*   *in'ei-we-ni.*
        he-3SG   story-V-3SG   he-3SG   dog-ACC-3SG
        'He$_i$ is talking about his$_j$ dog.'

(1598) a.   *Bi*   *kusige-i*   *nodo:-mi.*
        me   knife-REF   lose. PAST-1SG
        'I lost my knife.'

     b.   *Bi*   *si*   *kusige-we-i*   *nodo:-mi.*
        me   you   knife-ACC-2SG   lose.PAST-1SG
        'I lost your knife.'

In a similar fashion, the participle within the embedded complement, adverbial or relative clause that is accusatively marked in different-subject sentences remains in the Nominative in the same-subject structures (See Chapters 19–21). The Destinative reflexive object is marked by the Destinative case.

(1599) a.   *Peimu-ne-mi*   *wo:-ni,*   *iŋzala-ma*
        raft-DEST-REF   make.PAST-3SG   fir.tree-ADJ
        gou-ne-mi   *wo:-ni.*
        pole-DEST-REF   make.PAST-3SG
        'He made a raft and a pole for himself from a fir-tree.' (K 119)

     b.   *Mamasa-na-mi*   *i:-le*   *b'a-i?*
        wife-DEST-REF   what-LOC   find.PAST-2SG
        'Where did you find a wife for yourself?' (K 146)

     c.   *Jandasa*   *xaisi*   *agdu-ne-mi*   *ule-ini.*
        badger   also   hole-DEST-REF   dig-3SG
        'The badger is also digging a hole for himself.'

22.3.3. Antecedent of the reflexive element

As was mentioned in 15.1.1, the only controller of reflexivization within the clause is the subject. No other elements, including subjectoids, which exhibit certain subject properties (15.1.3), are able to become an antecedent of

reflexive relationship. Sentence (1600a) demonstrates that the reflexive element (the Reflexive Possessive affix -*i* in this case) cannot be controlled by the direct object (*ni:-we*), (1600b) demonstrates the same for the indirect object (*neŋu-du-i*), (1600c) for the adverbial element (*aziga* 'girl'), and (1600d) for the passive agent (*b'ata-du* 'by the boy').

(1600) a.   *Nua-ni*   *jagdugu-xi*   *ni:-we*
           he-3SG   spectacles-ADJ   man-ACC
           ise:-ni   *zugdi-du-i.*
           see.PAST-1SG   house-DAT-REF
           'He$_i$ saw a man$_j$ in spectacles in his$_{i/*j}$ house.'

     b.   *Nua-ni*   *xula*   *zä:-wa*   *neŋu-du-i*
           he-3SG   extra   money-ACC   younger.sibling-DAT-REF
           bu-o:-ni   *zugdi-du-i.*
           give-PAST-1SG house-DAT-REF
           'He$_i$ gave extra money to his$_i$ brother$_j$ in his$_{i/*j}$ house.'

     c.   *B'ata*   *aziga*   *zä:*   *te:-ini*   *zugdi-du-i.*
           boy   girl   next   sit-3SG   house-DAT-REF
           'The boy$_i$ is sitting next to the girl$_j$ in his$_{i/*j}$ house.'

     d.   **Oloxi*   *b'ata-du*   *men-e*   *mäunda-zi:*
           squirrel   boy-DAT   REF-0   gun-INST.REF
           wa-wo:-ni.
           kill-PAS.PAST-3SG
           'The squirrel was killed by the boy with his own gun.'

The following example demonstrates that reflexivization can be controlled by the pronominal Nominative subject that corresponds to the patient/theme argument in the Passive construction:

(1601) *Nua-ni*   *abuga-du-i*   *daŋči-w-o:-ni.*
        he-3SG   father-DAT-REF   curse-PAS-PAST-3SG
        'He was cursed by his father.'

Linear precedence as such does not ensure reflexivization control, as in (1602) where the direct object *ñ'aula-wa* 'child' does not trigger Reflexive affixes on the element *abuga-ni* 'his father', even when preceding it.

(1602) *Ei* *ñ'aula-wa*   *bue-ni*   *abuga-ni*   *wa:-ni.*
        this child-ACC   he-3SG   father-3SG   kill.PAST-3SG
        'This child was killed by his father.'

However, in practice the subject almost always precedes the target of reflexivization.

The Reflexive element does not act as a subject itself, unless it is used in an emphatic function with the meaning 'independently, by itself' (9.2.1.1).

(1603) a. *Men-e   nakta-wa   ise:-mi.*
           REF-0   boar-ACC   see.PAST-3SG
           'He himself saw the boar.'
       b. *Men-e   sita-i   nakta-wa   ise:-mi.*
           REF-0   son-REF   boar-ACC   see.PAST-3SG
           'His son saw the boar.'

The subject antecedent of the reflexive element may be absent from the clause. In this case we either deal with an impersonal construction in which the reflexive has no syntactic antecedent at all (see 15.1.4.2), or the subject is dropped under coreference.

(1604) a. *Men-e   in'ei-du-fei   bu-je.*
           REF-0   dog-DAT-REF.PL   give-IMP.2SG
           'Give it to your dogs.'
       b. *Men-e   kawa-tigi: neu-gi-e-ni*
           REF-0   tent-LAT.REF   carry-REP-PAST-3SG \
           loŋko-wo.
           pot-ACC
           'He carried the pot to his grass tent.'

If the subject antecedent corresponds to an interrogative pronoun, it lacks a reference.

(1605) *Xeune-mi   je'u   getu   buŋie-fei*
        be.surprised-1SG   who   PL   dead-REF.PL
        eje-u-kte-iti.
        float-CAUS-DIS-3PL
        'I am surprised: who are those (people) who make their dead float (down the river)?' (SK 1025)

22.3.3.1. Clause-bound control

The relationship between the reflexive element and its antecedent holds within a simple clause. The reflexive element can be found in any position in the clause. The set of examples below shows that virtually any element within this domain can be controlled for reflexivization: a modifier noun phrase (1606a), the argument of an adjective (1606b), and an immediate constituent of the clause, which in this case corresponds to the Dative causee argument (1606c).

(1606) a.   *Sita-na-i*   *begdi-le-ni*   *sasä:-ni.*
         child-PL-REF   foot-LOC-3SG   make.hole.PAST-3SG
         'He made holes in the feet of his children.' (K 169)

      b.   *Sita*   *ami-mi*   *bejeku.*
         child   father-REF   like
         'The child looks like his father.'

      c.   *Ei* *tege-we*   *a:nta*   *xunazi-du-i*
         this gown-ACC   woman   sister-DAT-REF
         uli-weŋ-ki-ni.
         sew-CAUS-PAST-3SG
         'The woman let her sister sew this dress.'

Examples (1607) show that the target of reflexivization can be found within the scope of the secondary predicate, as indicated by the bracketing.

(1607) a.   *Nua-ni*   *gagda-i*   *anči-du-ni*   *bagdi-mi*
         he-3SG   [friend-REF   no-LOC-3SG]   live-INF
         ei-ni   *mute.*
         NEG-3SG   can
         'He can't live without his friend.'

      b.   *Uti ñ'aula ami-mi*   *bubei-zi*
         this child [father-REF   similar-INST]
         bagdi-gi-e-ni.
         live-REP-PAST-3SG
         'This child was born looking like his father.'

22.3.3.2. Control across clauses

The superordinate clause subject controls the reflexivization of the subordinate clause subject, as illustrated in (1608). In (1608a), the superordinate null subject is the antecedent of the Possessive suffix on the subject noun phrase within the subordinate adverbial purpose clause (*neŋu-mi*). In (1608b) the superordinate subject *waŋba-ŋi-ni* 'the tortoise' controls the Reflexive Possessive suffix on the relative subordinate clause subject *oloxi-ŋi:* (< *oloxi-ŋi-i*) 'its squirrel'.

(1608) a.   *J'e-we-de*   *zawa-ini*   *neŋu-mi*
         what-ACC-IND   take-3SG   [younger.sibling-REF
         e-lege-ni   *tagda-gi.*
         NEG-PURP-3SG   recognize-REP]
         'She takes everything so that her brother does not recognize her.'
         (K 167)

b. *Waŋba-ŋi-ni*   *ise-si:-ni*   *aja-zi-de*
    tortoise-AL-3SG   see-IM-3SG   good-INST-FOC
    oloxi-ŋi: *xaŋka-kca-i-we-ni.*
    [squirrel-AL.REF   choke-DUR-PRP-ACC-3SG]
    'The tortoise took a good look at the choking squirrel.'

These examples involve dependent clauses based on non-finite verbal forms. In (1609) we show that the same applies to finite clauses. In (1609a) the finite subordinate clause subject *b'ata-ŋi:* 'her son' stands in the reflexive relationship to the matrix clause (null) subject. In (1609b) the two clauses are conjoint, while (1609c) is an example of the finite correlative construction.

(1609) a. *Ise-si:-ni,*   *b'ata-ŋi:*   *omo*   *aziga*   *gumu*
           see-IM-3SG   [boy-AL.REF   one   girl   EV
           eme-ini.
           come-3SG]
           'She sees that her son and a girl are coming.'
      b.   *Xeke*   *tiŋme:-ni*   *xegi,*   *sogdö-i*
           suddenly   fall.PAST-3SG   down   back-REF
           bukta-bukta-da.
           break-break-FOC
           'Suddenly he fell down and broke his back.'
      c.   *Men-e*   *j'e-le*   *uni:*   *bi-si-ni*
           REF-0   what-LOC   be.sick.PRP   be-PP-3SG
           uta-la   *ni:-du*   *begdi-le-ni*
           that-LOC   man-DAT   leg-LOC-3SG
           ŋala-la-ni   *aula-waŋ-ki-ni.*
           arm-LOC-3SG   swell-CAUS-PAST-3SG
           'Where he felt pain himself, there he caused a tumor on man's arms and legs.' (SK 660)

The opposite relationship is ruled out. In (1610a) the null subject of the embedded clause is referred to by Possessive affixes on the superordinate clause subject (*mama-ni ami-ni mamasa-ni* 'his mother, his father, and his wife'). However, this does not trigger reflexivization: non-reflexive Possessives must be present, while Reflexive Possessives in such a case would be ungrammatical. Example (1610b) demonstrates that the subordinate subject cannot control Reflexive affixes on the superordinate subject even if it precedes it linearly, that is why the non-reflexive Possessive affix is used (*sita-ni* 'her son').

(1610) a.   *Ma:ma-ni*   *ami-ni*   *mamasa-ni*
            grandmother-3SG   father-3SG   wife-3SG
            ise-si:-ti   *ñaŋña-tigi*   *degdi-gi:-we-ni.*
            see-IM-3PL   [sky-LAT   rise-REP.PRP-ACC-3SG]
            'His grandmother, his father, and his wife saw him rising back to
            the sky.'

       b.   *Eniŋe*   *eme-gi:-ni*   *zulie-ni*   *zube*
            [mother   come-REP.PRP-3SG   before-3SG]   two
            časa   *ŋua:*   *bi-s'e*   *sita-ni.*
            hour   sleep.PP   be-PERF   son-3SG
            'Before the mother came, her son had slept for two hours.'

Crucially, elements of the subordinate clause other than its subject are not controlled for reflexivization by the superordinate clause subject. In other words, the relationship between the antecedent and the reflexive element cannot cross the subject. For example, in (1611a) the element of the subordinate clause *nua-ma-ni* 'him' is not reflexive, although it is coreferential with the superordinate clause subject *ñ'aula* 'child'. The same holds for (1611b).

(1611) a. *Ñ'aula*   *muisi:-ni*   *abuga-ni*   *nua-ma-ni*
            child   think-3SG   [father-3SG   he-ACC-3S
            men-zi   *geje*   *xebu-ze*
            REF-INST   together   take-SUBJ
            wakca-na-mi   *gun-e-ini.*
            hunt-DIR-INF]   say-0-3SG
            'The child$_i$ thinks that the father will take him$_i$ hunting.'

       b.   *Mamasa-na-tigi-ni* *digaŋ-ki-ni*   *e-le-ti*
            wife-PL-LAT-3SG   say-PAST-3SG   NEG-PURP-3PL
            xeŋisi   *nua-ni*   *xokto-wo-ni.*
            step   he-3SG   footstep-ACC-3SG
            'He told his wives not to step on his footsteps.' (SKX 316)

The elements of the subordinate clause other than its subject are controlled by the subject of the clause within which they occur, as shown in (1612). The reflexive element in (1612a) is *aka-i* 'his (self's) back', while its antecedent is a subject of the subordinate purpose clause *od'o* 'grandfather'. In same-subject sentences the reflexive elements found in the superordinate and the subordinate clause naturally have the same antecedent (1613).

(1612) a.　*Egdi-we*　　　　　　*to:*　　*ilasi-je*　　　　　*od'o*
　　　　much-ACC　　　　　fire　　kindle-IMP.2SG　　　[grandfather
　　　　aka-i　　*siesi-lege-ni.*
　　　　back-REF　warm-PURP-3SG]
　　　　'Make a lot of fire so that the grandfather warms his back.' (K 171)
　　　b.　*Su:*　　　　*ai-le-i*　　　　　　*gakpa-gi:*　　　　*dexi*
　　　　　[sun　　　seat-LOC-REF　　　shine-REP.PRP　　till]
　　　　　ŋua-ini.
　　　　　sleep-3SG
　　　　　'She sleeps till the sun again starts shining in its seat.'

(1613) *Men-e*　*käŋa-i*　　　*wa:-mi*　　　*kä:-la-ni*
　　　　[REF-0　deer-REF　　kill.PP-SS]　side-LOC-3SG
　　　　te:-ini.
　　　　sit-3SG
　　　　'He$_i$ is sitting near the deer he$_i$ killed.'

In the object control sentence (1614) reflexivization is controlled by the zero subject of the subordinate clause. Its antecedent is the direct object of the matrix clause (*Si Säŋa-wa*).

(1614) *Ute bede*　　　*wadi-weŋ-ki-ni*　　　　　　*Pakula*　　*Si*
　　　　hat like　　　stop-CAUS-PAST-3SG　　　　Pakula　　Si
　　　　Säŋa-wa　　*aŋda-i*　　　　*tai-wasi-kce-i-we-ni.*
　　　　San-ACC　　[Ø tax-REF　　collect-DIST-DUR-PRP-ACC-3SG]
　　　　'In such way Pakula$_i$ made Si San$_j$ to stop collecting his$_{*i/j}$ taxes.'

22.3.3.3. Split antecedents

Udihe allows for "split antecedents" for reflexives. In this case there is only partial identity between the subject referent and the reflexive element, namely, they stand in an inclusive relationship to each other. In the example below, the reflexive possessor is semantically Plural, as is indicated by the Plural reflexive element *-fei*. The subject is in the Singular, but semantically its referent is part of the set denoted by the reflexive element. The second member of the set is denoted by an Instrumental noun phrase *Ajaula-ʒi*.

(1615) *Kičo Ajaula-zi*　　　*soŋo-ti*　　*guas'a-ŋi-fei*
　　　　Kičo Ajaula-INST　　cry-3PL　　bitch-AL-REF.PL
　　　　nanta-mi.
　　　　sorry-INF
　　　　'Kičo with Ajaula cried, feeling sorry for their bitch.' (SKX 212)

A similar case is illustrated in (1616), where the subject participant is only one of two referents indicated by the Reflexive Plural marker. In principle, the Possessive marker *-fi* in *b'ata-ŋi-fi* 'our son' can be understood either as a Reflexive affix or as a 1ˢᵗ person Plural inclusive Possessive affix, since these markers are homonymous. The lack of the Accusative case inflection, however, rather implies the first interpretation (see 22.3.2 on the lack of the object marker on reflexive objects).

(1616) *I:-du*   *omo-s'o*   *b'ata-ŋi-fi*
     what-DAT   one-ADJ   boy-AL-1PL.IN
     ja-la:-mi   *wa-kca-i*   *si*   *uta-wa?*
     PROV-PURP-SS   kill-DES-2SG   you   that-ACC
     'Why do you want to kill our only son?' (K 190)

Note that the Udihe switch reference system, which is partly based on reflexives, also marks partial identity of referents as coreferentiality (see 22.2.5).

22.4. Reciprocalization

By reciprocal we mean those constructions in which each of the participants denoted by the subject noun phrase corresponds to two different semantic roles (for example, agent and patient, agent and recipient, etc). In Udihe even the oblique object and many adjuncts can reciprocalize: reciprocalization is conditioned by semantic rather than syntactic constraints. The first antecedent of the reciprocal, however, is always the subject participant.

Reciprocal construction may involve a voice-driven verbal derivation, marked with the suffix *-masi-* (8.2.1.1). Such "morphological" reciprocals were addressed in section 16.1.5. In addition, the reciprocal meaning can be expressed lexico-syntactically, by means of Reciprocal pronouns (22.4.1) or syntactic reduplication (22.4.2), but without morphological changes in the verb. The lexical reciprocal elements overtly indicate which non-subject participant is involved in the reciprocal relationship. Lexico-syntactic reciprocalization does not seem to affect the valency of the verb, while morphological reciprocalization is often accompanied by a valency reduction (detransitivization).

22.4.1. Constructions with Reciprocal pronouns

22.4.1.1. Reciprocal object

The reciprocal meaning can be expressed exclusively by Reciprocal pronouns
when the two semantic roles that correspond to these pronouns are the agent
and the patient. Thus the Reciprocal pronoun corresponds to the direct object
role. The object Reciprocal pronouns are *mef(e)i* or its reduplicated variant
mef(e)i-mef(e)i 'each other' (9.3). The subject may be the Plural noun (1617),
or the collective Singular noun (1618). In the latter case the antecedent is in the
Singular. The verb always takes Plural agreement affixes. The construction is
ambiguous because it can refer to any number of participants larger than one.

(1617) a. *Nua-ti*   *oŋmo:-ti*   *mefei-mefei-de.*
          he-3PL   forget.PAST-3PL   REC-REC.ACC.PL-FOC
          'They forgot each other.'

     b. *Nua-ti*   *mefei-mefei*   *teti-gi:-ti.*
          he-3PL   REC-REC.ACC.PL   dress-REP-3PL
          'They dress each other.'

     c. *Ñ'aula-ziga*   *mefei-mefei*   *uli-zi*   *ekpisi:-ti.*
          child-PL   REC-REC   water-INST   spray-3PL
          'Children are spraying water at each other.'

     d. *Bu mefei-mefei*   *e-u*   *b'a-gi.*
          we REC-REC.ACC.PL   NEG-1PL.EX   find-REP
          'We do not find each other.'

     e. *Nua-ti*   *mefei-mefei*   *ŋele-wasi:-ti.*
          he-3PL   REC-REC.ACC.PL   be.afraid-CAUS-3PL
          'They frighten each other.'

(1618) *Ei*   *zugdi-ŋke*   *mefei*   *teu*   *aju-iti.*
       this   house-N   REC.ACC.PL   all   love-3PL
       'In this family everybody loves one another.'

Reciprocalization of an oblique object may sometimes be expressed by the
Nominative form of the Reciprocal pronoun, and this is not morphologically
marked on the verb. At out disposal we only have examples where an
Instrumental (1619) or an Ablative (1620) object is reciprocalized.

(1619) a. *Nua-ti*   *men-e-men-e*   *ŋele-iti.*
          hc-3PL   REC-0-REC-0 be.afraid-3PL
          'They are afraid of each other.'

     b. *Nua-ti*   *men-e-men-e*   *zima-mi*   *xuli:-ti.*
          he-3PL   REC-0-REC-0 visit-INF   go-3PL
          'They give visits to each other.'

(1620) *Men-e-men-e*   *dekte-li-e-ti.*
   REC-0-REC-0   separate-INC-PAST-3PL
   'They started separating from each other.' (Schneider 1937: 28)

22.4.1.2. Reciprocal modifier

When the coreferential relationship holds not between the subject and the immediate constituent of the clause, but between the subject and the possessor, this is expressed by the Nominative Reciprocal pronoun in the modifier function (9.3). There do not seem to be any syntactic restrictions on the role of the head noun within the clause: it can correspond either to the argument or to the adjunct. Remarkably, the Nominative Reciprocal pronoun is morphologically identical to the repeated form of the Reflexive pronoun *men-e-men-e*. However, in the reciprocal construction the head noun is not marked by any Possessive suffixes. This makes it different from the Reflexive Possessive Plural construction, which requires a reflexive possessive marking on the head noun. Cf. (1621a) with a reflexive reading and (1621b) with a reciprocal reading.

(1621) a. *Men-e-men-e* *xokto-zi-fi*
    REF-0-REF-0 road-INST-REF.PL
    ŋene-kte-gi-e-ti.
    go-DIST-REP-PAST-3PL
    'They went on along their road.'
  b. *Men-e-men-e* *xokto-zi* *ŋene-kte-gi-e-ti.*
    REC-0-REC-0 road-INST go-DIST-REP-PAST-3PL
    'They went back on each other's road.'

For distributive reflexives (see 9.2.1.1) the possessive marking on the head is optional, cf.:

(1622) a. *Men-e-men-e* *sina-wa*   *xeli* *xeli*
    REF-0-REF-0 burden.frame-ACC quick quick
    obol'o.
    divide.PERF
    'Each if them quickly put on his own burden frame.'
  b. *Uta bede* *bagdi-e-ti* *men-e-men-e* *na:-di-fei.*
    that like live-PAST-3PL REF-0-REF-0 land-DAT-REF.PL
    'They started living like this, each on his own land.' (SKX 326)

This fact may indicate that the Reciprocal pronoun and sometimes the distributive Reflexive pronoun function as an adverbial rather than a possessor within a possessive noun phrase.

In such reciprocal constructions the verb exhibits Plural agreement.

(1623) a. *Mamaka*   *mafasa*   *men-e-men-e*
           old.man   old.woman   REF-0-REF-0
           ñukte-le   *kitiga-si:-ti.*
           hair-LOC   pull-IM-3PL
           'The old man and the old woman are pulling each other's hair.'
      b.   *Men-e-men-e*   *kusige-we*   *gele-masi:-ti.*
           REF-0-REF-0   knife-ACC   ask-REC-3PL
           'They ask for each other's knife.'

22.4.2. Constructions with reduplications

These constructions are available when the reciprocal relationship holds
between the subject and an adverbial element that would normally be expressed
with a postpositional noun phrase. The verb shows Plural agreement, and the
plurality of the subject is expressed either morphologically or through
coordination. Reciprocalization is encoded by the reduplication of the
postposition, cf. (1624a) and (1624b):

(1624) a. *B'ata*   *aziga*   *zä:*   *te:-ini.*
           boy   girl   next   sit-3SG
           'The boy sits next to the girl.'
      b.   *B'ata*   *aziga*   *zä:*   *zä:*   *te:-iti.*
           boy   girl   next   next   sit-3PL
           'The boy and the girl sit next to each other.'

The reduplicated postposition is here the only Reciprocal marker. In addition, it
specifies which non-subject participant is involved in the reciprocal relation.

22.4.2.1. Reduplication of postpositions

The reduplicated reciprocal construction is, of course, subject to semantic
restrictions, but generally is available with all or most postpositions.

(1625) a. *Amä:ta*   *amä:ta tukä-iti*   *ñ'aula-ziga.*
           after   after run-3PL   child-PL
           'Children are running after each other.'

b. *Ut'asi*   *tene*   *uti*   *kil'ai-ziga*   *dieli-e-ti*
    then   CONT that   seagull-PL   fly-PAST-3PL
    amä:ta   *amä:ta.*
    after   after
    'Then these seagulls flew, one after another.' (K180)

c. *Zä:*   *zä:*   *xuli:-ti.*
    next   next   walk-3PL
    'They are walking next to one another.'

d. *Nua-ti*   *geje*   *geje*   *xuli:-ti.*
    he-3PL   with   with   go-3PL
    'They walk with one another.'

f. *D'ofo*   *d'ofo*   *bagdi:-ti.*
    like   like   live-3PL
    'They go through life looking similar to one another.'

22.4.2.2. Reduplication of other elements

The repetitive reciprocal construction is also possible when the subject is coreferential with the argument of an adjective (such as those described in 6.3.2) or an adverb; in this case it requires its reduplication.

(1626) a. *Xa:-mule*   *bejeku* *bejeku* *bi:-ni.*
    relative-N   similar similar be-3SG
    'Relatives look like each other.'

b. *Pazi*   *pazi*   *bagdi-li-e-ti.*
    separately   separately   live-INC-PAST-3PL
    'They started living separately from each other.' (SK 463)

The example below illustrates highly individualized expressions which involve the reduplication of a noun.

(1627) a. *Zolo*   *kakt'a* *kakt'a* *gekti-wen-e-mi.*
    stone   half   half   freeze-CAUS-0-1SG
    'I make stones to freeze against one another.' (K 124)

b. *Bi* *abuga-i*   *zuala* *zuala-zi*   *ima:-wa*
    me father-1SG   ski   ski-INST   snow-ACC
    giugi:-ni.
    shake.off-3SG
    'My father is shaking the snow off by (beating) the skis against one another.'

c. *Ule:-we*   *geje*   *geje*   *obolo-zoŋo-fi.*
    meat-ACC together   together   divide-FUT-1PL.IN
    'Let us divide the meat equally.'

d. *bu:-zi*   *k'ä-fa*   *k'ä-fa*   *sikti-si-mi*
    flint-INST   edge-ACC   edge-ACC   hit-IM-INF
    'to hit flints against one another' (SK 470)

e. *Wac'a*   *wac'a*   *okto-wo*   *jeugie-mi*   *tu:*
    little   little   medicine-ACC   bring-INF   all
    okto-si-e-ni.
    medicine-V-PAST-3SG
    'He brought a little of each medicine and cured (him) with them
    all.' (SK 214)

f. *Sagdi*   *bu:-we*   *b'a*   *ut'as(i)*   *zolo-zi*
    big   flint-ACC   find   then   stone-INST
    zolo-zi   *kakta-sie,*   *nekce-iti.*
    stone-INST   split-IM.PRP   keep-3PL
    'When they find a big flint, they split it (hitting) one stone against
    another and keep it.'

Finally, clausal reduplication is also possible when the verb express a naturally
reciprocal situation.

(1628) a. *Ni*   *maje*   *ni*   *maje*   *ana-masi:-ti.*
           who   strong   who   strong   push-REC-3PL.
           'They push each other (trying to see) who is stronger.' (SKX 302)

b. *Gusi:-ti*   *b'ata-ma*   *sita-ziga*   *ni*   *ete-i*
    play-3PL   boy-ADJ   child-PL   who   win-PRP
    ni   *ete-i.*
    who win-PRP
    'The boys play with each other (trying to see) who will win.'
    (SKX 302)

22.5. Switch reference

As in canonical switch-reference systems, in some contexts Udihe opposes the
same- subject (SS) markers and the different-subject (DS) markers. Same-subject
markers indicate the coreference of two subjects. Functionally, they appear to
maintain the topic, that is, the central participant controlling zero-anaphora in a
given fragment of text ("topic continuity"). Different-subject markers indicate a
lack of coreference between two subjects, and the lack of topic continuity. The
ability to control same-subject switch reference markers is the most important
grammatical property for identifying the subject (see 15.1.1), and is not shared by
any other grammatical relations. As in most languages, the switch reference
system in Udihe works for all persons in spite of the fact that it is clearly
redundant for the 1st and 2nd person singular.

The same-subject/different-subject relation in Udihe holds between the superordinate clause and the non-finite subordinate clause (the relative clause (Chapter 19), the complement clause (Chapter 20), and the adverbial clause (Chapter 21). However it does not hold between two independent clauses or between the main clause and the finite subordinate clause. It is always the subordinate clause that is marked for same-subject/different-subject, while the main clause is the controlling one. When a subordinate clause is syntactically embedded in another subordinate clause, the switch-reference relationship in it is always controlled by the immediately super-ordinate clause. For example, in (1629) the same-subject marker on *kuzi-ge-si* 'having bent down' indicates the coference with the subject of the immediately superordinate clause 'Ivan picked something up', which is in its turn embedded in the main clause 'I saw'. Example (1629b) demonstrates "three-level" same-subject relationship.

(1629) a.　　*Bi　ise:-mi*　　　　　　　　*Iwana　kuzi-ge-si*
　　　　　　　me　see.PAST-1SG　　　　　[Ivan　[bend.down-PERF-PC.SS]
　　　　　　　j'e-we-ke　　　　　*zawa-i-wa-ni.*
　　　　　　　what-ACC-IND　　　　take-PRP-ACC-3SG]
　　　　　　　'I saw that Ivan bent down and picked something up.'
　　　b.　　*Men-e　　　mala-zaŋa-i　　　bodo-si-mi*
　　　　　　　[[REF-0　　　finish-FP-SS]　　count-IM-INF]
　　　　　　　olokto:-ni.
　　　　　　　cook.PAST-3SG
　　　　　　　'He cooked (it) counting what he himself would finish (eat).' (K 129)

On the surface expression of the subject in subordinate clauses see 22.2.1.3.

22.5.1. Encoding of switch reference

In Udihe, there are two strategies indicating the same-subject, depending on the clause type. Both of these strategies are attested cross-linguistically (Haiman and Munro 1983).

22.5.1.1. The "syncretic" strategy

The same-subject can be indicated by a syncretic portmanteau morph that encodes not only the same-subject but also the function of the subordinate clause. This morpheme is different from the morpheme used in the corresponding type of different-subject clause. Here the mere choice of a particular switch-reference morpheme indicates the type of syntactic relation. In addition, the different-subject relationship is encoded by the subject agreement marker.

The syncretic strategy is used in adverbial clauses with Conditional Converbs (7.6.2.4) and Perfective Converbs (7.6.2.3). In (1630) we illustrate the switch-reference contrast for the Conditional Converb: example (1630a) illustrates the same-subject, example (1630b) the different-subject. In (1631) the Perfective Converb is represented by both the same-subject form (*metu-ge-si* 'having finished') and the different-subject form (*a:da bi:-si-ni* 'after it is ready').

(1630) a. *'Ai-we*   *umi-lie*   *jexe-zeŋe-ti.*
          [vodka-ACC   drink-CC.SS.PL]   sing-FUT-3PL
          'If they drink some vodka, they will sing.'
     b. *Eke*   *bi-lisi-ni*   *'ana-wa*   *aisi-zeŋe-i.*
          [time   be-CC-3SG]   boat-ACC   mend-FUT-1SG
          'If I have time (if there is time), I will mend the boat.'

(1631) *Gusi-mi*   *metu-ge-si*   *ulikte-ni*
          [play-INF   finish-PERF-PC.SS]   lard-3SG
          olokto-gi:-ni   *olokto-mi*   *a:da*   *bi:-si-ni.*
          cook-REP-3SG   cook-INF   ready   be-PC-3SG
          'Having finished playing he cooks the lard to a turn.'

22.5.1.2 The "reflexive" strategy

This strategy is used in all types of clauses with active participles (7.6.1.1), as well as in adverbial clauses with Imperfective Converbs (7.6.2.2) and Purposive Converbs (7.6.2.1). The same morph marks the clause type in clauses with the different-subject and the same-subject. It is obligatorily followed by a switch-reference affix, which is either a usual agreement Possessive suffix (4.1.4.1) for different-subject, or a Possessive Reflexive suffix for same-subject: *-i* or *-mi* (variations are conditioned by the historical stem type, see 4.1.4.2) for Singular and *-f(e)i* for Plural subject. The Singular same-subject marker *-i* is employed in Present and Future Participles and in the Imperfective Converb. The Singular same-subject marker *-mi* is employed in Past Participles and Purposive Converbs. In same-subject relative clauses of a certain type (19.1.1) the personal affix on the participle can be completely absent.

In (1632) we illustrate the switch-reference contrast for the adverbial clause with an Imperfective Converb, and in (1633) and (1634) for the adverbial purpose clause.

(1632) a. *Nua-ni*   *ei*   *aziga-wa*   *ic'a*   *bi-ŋie-i*
       he-3SG   this   girl-ACC   [small   be-IC-SS]
       aju-o:-ni.
       love-PAST-3SG
       'He loved this girl when he was young.'

    b. *Nua-ni*   *ei*   *aziga-wa*   *ic'a*   *bi-ŋie-ni*
       he-3SG t   his   girl-ACC   [small   be-IC-3SG]
       aju-o:-ni.
       love-PAST 3SG
       'He loved this girl when she was small.'

(1633) a. *Aziga*   *aja*   *tege-we*   *teti-gi:-ni*
       girl   good   gown-ACC   dress-REP.PRP-3SG
       alagdig'a bi-lege-mi.
       [pretty be-PURP-SS]
       'The girl dresses up nicely in order to be pretty.'

    b. *Aziga*   *aja*   *tege-we*   *teti-gi:-ni*   *b'ata*
       girl   good   gown-ACC   dress-REP.PRP-3SG   [boy
       aju-lege-ni.
       love-PURP.3SG]
       'The girl dresses up nicely in order for the boy to love (her).'

(1634) a. *Sa:-laga-mi*   *taŋi-ja*   *a-wa.*
       [learn-PURP-SS]   read-IMP.2SG   that-ACC
       'Read this to learn it.'

    b. *Bi sa:-laga-i*   *taŋi-ja*   *a-wa.*
       [me learn-PURP-1SG]   read-IMP.2SG   that-ACC
       'Read this so that I can learn it.'

The same-subject participles follow the same pattern as the reflexive nouns: the Accusative is homonymous with the Nominative (cf. 22.3.2). So, in sentential object complement clauses that are normally expressed by the Accusative of the subordinate participle (20.2.2.1) and in the Accusative temporal clauses (21.3.2.9), the participle appears in the Nominative in the same-subject clause, cf. (1635a) and (1635b). The same applies to the relative clause where the participle would normally be marked for the Accusative (1636).

(1635) a. *Nua-ni*   *teluŋu-si-e-ni*   *Iwana Moskva-tigi*
       he-3SG   story-M-PAST-3SG   [Ivan   Moscow-LAT
       xuli-e-me-ni.
       go-PP-ACC-3SG]
       'He said that Ivan had traveled to Moscow.'

b. *Nua-ni*   *teluŋu-si-e-ni*   *Moskva-tigi*
he-3SG   story-V-PAST-3SG   [Moscow-LAT
xuli-e-mi.
go-PP-SS]
'He$_i$ said that he$_i$ had traveled to Moscow.'

(1636) a. *Ni: te:-ni*   *ñuŋui* *in'ei-we*   *wa:-ni*
man sit.PAST-3SG [wolf dog-ACC   kill.PP-3SG
kä:-la-ni.
side-LOC-3SG]
'The man sat near the dog killed by the wolf.'

     b. *Ni:*   *te:-ni*   *men-e*   *in'ei*
man   sit.PAST-3SG REF-0   [dog.REF
wa:-mi   *kä:-la-ni.*
kill.PP-3SG   side-LOC-3SG]
'The man$_i$ sat near the dog that he$_i$ killed.'

     c. *Bi   oloxi*   *wa:-mi*   *anda-du-i*   *teu*
[me squirrel]   kill.PP-SS]   friend-DAT-REF   all
bu-o:-mi.
give-PAST-1SG
'I gave all the squirrels I killed to my friend.'

Switch-reference for these types of clauses is therefore based on the reflexive marking, and the same-subject relation can be viewed historically as a particular instance of reflexivization. Reflexives, as distinct from the switch reference system, usually encode coreference rather than its absence (Comrie 1983: 22); in the pattern in question both coreference and non-coreference of two subjects are expressed, by means of different affixes.

22.5.1.3. Infinitival clauses

The infinitival subordinate clauses, complement clause (20.1.1, 20.2.1) and adverbial clause (21.1), do not allow a different-subject relationship (except for clauses controlled by the Dative experiencer, see 20.1.1.3, and certain cases of an inalienable possessive relationship between two subjects, see 15.1.1.6.2). So the corresponding different-subject clauses do not exist. The Infinitive (7.6.3.1.1) itself is derived from the verbal stem with a suffix *-mi,* which seems to go back to the Reflexive (same-subject) Singular affix; so, at least historically, it is associated with the "reflexive strategy" (22.5.1.2). The Infinitive can be viewed historically as a reflexive form of a bare verbal stem. Since a specialized Plural suffix is missing, the Infinitive can encode coreference for both Singular and Plural subjects. Examples for Singular (1637) and Plural (1638) subjects are:

(1637) a. *Sin-e-we*   *omo*   *Kanda mafa*   *gene-mi*
           [you-0-ACC   one   Kanda old.man   engage-INF]
           eme:-ni.
           come.PAST-3SG
           'One old man Kanda came to arrange for your engagement.'
       b. *Mafa-la-mi*   *soŋo:-ni.*
           [man-V-INF]   cry.PAST-3SG
           '(She) was crying while getting married.'

(1638) *A:nta*   *anana*   *uŋta-wa*   *uli-mi*   *dian-a-mi*
       woman   long.ago   [boot-ACC   sew-INF]   say-INF
       uli-e-ti.
       sew-PAST-3PL
       'In older times women used to sew boots while talking (to each other).'

22.5.1.4. Summary

The overall formal system of switch-reference is presented below.

(1639) Switch-reference system

predicate of the subordinate clause	SS SG	SS PL	DS
"Syncretic" strategy			
Perfective Converb	*-si*	*-du-si*	*-isi-* + Possessive
Conditional Converb	*-lie*	*-li*	*-lisi-* + Possessive
Perfective Converb	*-nA:*	*-nA:*	-
"Reflexive" strategy			
Present and Future Participles	*-i*	*-fei*	Possessive
Past Participles	*-mi*	*-fei*	Possessive
Imperfective Converb	*-i*	*-fei*	Possessive
Purposive Converb	*-mi*	*-fei*	Possessive
Infinitive	*-mi*	*-mi*	-

22.5.2. Number mismatches

As was shown in 22.5.1, the switch-reference system is largely based on Reflexives. As is well known, cross-linguistically the system of Reflexives tends to be more reduced in comparison with the non-reflexive personal

system. Since Reflexive merely indicate that one participant is coreferential with another participant (usually the subject), opposition in person and number is redundant. In the same way the switch-reference markers specify a certain coreferential relationship between the clauses in the discourse sequence: they show that two events share the same subject participant, and therefore do not need to be specialized in person and number.

In Udihe, neither Reflexives nor switch reference markers are opposed for different persons, but they demonstrate the opposition between Singular and Plural. Thus the particular property of Udihe is the consistent distinction between the Singular and Plural in all same-subject forms. A question arises concerning how the language treats the ambiguous cases of semantic "inclusion", when a subject participant of one clause is a member of a group of participants that correspond to the subject of the second clause. Such situations can be understood cross-linguistically either as same-subject or as different-subject.

The possible number mismatches relevant for Udihe are schematized in (1640) and certain cases are studied below.

(1640) "inclusive" subject   "subset" subject
     we (IN)   me, you (SG, PL), he/they, we (EX)
     we (EX)   me, he/they
     you (PL)   you (SG), he/they
     they   he/they

Although our material is not complete, it seems that all cases of semantic inclusion between two subjects must be marked by same-subject switch reference markers on the subordinate clause predicate. Recall from section 15.1.1.6.2 that the part-whole relationship between two subjects is encoded as same-subject in the infinitival clauses. Unfortunately, we do not have evidence to show how it is marked in other types of dependent clauses.

22.5.2.1. The 3rd person number mismatches

With 3rd person subjects, when the subject of one subordinate clause semantically includes the subject of the superordinate clause, this is encoded by a same-subject Plural marker on the subordinate clause predicate. In (1641) the subordinate clause subject is in the Plural and the superordinate clause subject is in the Singular. The Plural here indicates rather the number of the subordinate clause subject than that of the main clause subject, that is, it refers to the actual number of participants of the corresponding clause, but does not indicate coreference of the two subjects in a strict sense.

(1641) a.   *Tima-dule*   *te:-gi-en-zi-fi*
            [tomorrow-LOC   get.up-REP-PAST-INST-SS.PL]
            sul'ai   *dian-a-ini.*
            fox   speak-0-3SG
            'The next day after they got up the fox spoke.' (K 156)

       b.   *Diga-si-mi*   *metu-o:n-zi-fi*   *sul'ai*
            [eat-IM-INF   finish-PP-INST-SS.PL]   fox
            dian-a-li-e-ni.
            speak-0-INC-PAST-3SG
            'After they finished eating the fox started speaking.'

       c.   *Diga-laga-fi*   *ei-de*   *ge:-ne.*
            [eat-PURP-SS.PL]   NEG-FOC   ask-DIR
            'He does not go to ask for food for them to eat.'

       d.   *Baja*   *mafa-wa*   *sauli-masi-le-fi*
            rich   old.man-ACC   have.feast-REC-PURP-SS.PL
            gele:-ni.
            invite.PAST-3SG
            'He invited the rich man to have a feast together.'

Similarly, partial coreference may be indicated by an infinitival form, cf.:

(1642) *Bagdi-mi*   *bagdi-mi*   *ti*   *emne*   *uti*   *loxo*
       [live-INF   live-INF]   that   once   that   shaggy
       in'ei   *mafa-ni*   *diana:-ni.*
       dog   husband-3SG   say.PAST-3SG
       'They lived, lived, and once that husband of the shaggy dog spoke.'

The reverse case is when the main clause subject is in the Plural and the subordinate clause subject is in the Singular and corresponds to one of several referents of the superordinate clause subject. In such a case the subordinate clause is marked as same-subject, as in (1643).

(1643) *Timana-ni*   *guliŋ-ki-ti*   *sul'ai-ŋi:*
       tomorrow-3SG   leave-PAST-3PL   [fox-AL.REF
       uŋkäla-na:.
       carry-PC.SS]
       'The next day they left while he was carrying the fox.' (K 154)

22.5.2.2. The 1st and 2nd person number mismatches

In the following example the main clause subject is the 1st person Plural Inclusive, while the embedded clause subject is 2nd person Singular, so it is

included in the reference of the main clause subject. The embedded clause is
marked by the same-subject switch-reference marker.

(1644) *Si*   *min-e-we*   *diga-za-mi*   *gu-mi*
       [you   me-0-ACC   eat-SUBJ-1SG   say-INF]
       ño:xan-du   *gusi-ze-fi*   *minti.*
       first-DAT   play-SUBJ-1PL.IN   we.IN
       'Before you say to me "I will eat (you)", let's play together.' (SKX 156)

If the subject of the superordinate clause ('you', 'me', 'we (EX)' or 'he') is a
semantic subset of the 1ˢᵗ person Plural subject of the subordinate clause, this is
marked by the agreement affix *-f(e)i* on the subordinate clause predicate.
Remarkably, the affix *-f(e)i* is ambiguous: it corresponds both to the Plural
same-subject and the 1ˢᵗ person Plural inclusive agreement marker. So it is not
possible to decide on formal grounds whether the affix on the subordinate
participle indicates same-subject or not. Given that in all other cases of
semantic inclusion Udihe indicates coreference rather than lack of coreference,
we will regard this affix as an indicator of the same-subject relationship.

(1645) a. *Bä:tu*   *edese*   *negus'e*   *gundi:-ni*
       Bätu   spouse   brother   without-3SG
       afasi-lege-fi   *eme-i.*
       [embrace-PURP-1PL.SS]   come-IMP.2SG
       'My husband Bätu, come and let us embrace (one another) while
       my brother is absent.' (K 127)
    b. *Teti-e*   *ise-lege-fi.*
       dress-IMP.2SG   [see-PURP-1PL.SS]
       'Put (it) on so we can have a look.' (K 160)
    c. *Min-e-we*   *tatusi-ja*   *gakpasi-laga-fi.*
       me-0-ACC   teach-IMP.2SG   [shoot-PURP-1PL.SS]
       'Teach me, so we can shoot (together).' (K 151)
    d. *Bua-ixi*   *ñu:-gi-u-ze,*   *Biatu-ziga,*
       place-LAT   go.out-REP-2PL-HORT   Biatu-PL
       megze-le:-fei.
       [compete-PURP-1PL.SS]
       'Go outside, Biatu, so we can compete.' (SKX 88)
    e. *Ge*   *ŋene-ze-mi*   *bi*   *lali*
       well   go-SUBJ-1SG   me   [starve
       e-lege-fi.
       NEG-PURP-1PL.SS]
       'Well, I will go so that we do not starve.'

In example (1646) the subject of the superordinate clause is the inclusive
'we', while the subject of the embedded clause is the exclusive 'we'. In such a

situation the speaker herself is the only participant of both situations. However, the subordinate clause is also marked as same-subject.

(1646) *Minti*   *i:ŋ-ki-ti*   *bu*   *anana*
       we   come-PAST-1PL.IN   [we.EX   long.ago
      bagdi-e-fi   *zugdi-le.*
      live-PP-SS.PL]   house-LOC
      'We came to the house where we used to live.'

Chapter 23
Questions and negation

23.1. Questions

Examples of deliberative and rhetorical questions are given in section 7.9.2.4 and 7.9.5.3, and of tag questions in 9.5.1.3. Echo-questions have not been recorded. On embedded questions see 23.1.4.

23.1.1. *Wh*-questions

In *wh*-questions the question word (a certain form of the Interrogative pronoun) replaces the questioned constituent. Question words are listed in 9.5. Any constituent of the main clause can be questioned in this way. The position of the question word is strictly before the finite predicate, in accordance with the more general rule on the preverbal position of the focus element (24.1.1). The only exception is the question word *i:mi* 'why' (23.1.1.6). In questions to the modifier the whole modified noun phrase must immediately precede the predicate. The preverbal question word, like other focus elements (24.1.1), may be sentence-initial (1647), however, other constituents (in particular the subject) can precede it, as in (1648).

(1647) a. *J'e-we*   *nixe-ini*   *si*   *sita-i?*
　　　　 what-ACC   do-3SG　　　 you　　 child-2SG
　　　　 ŋua-ini.
　　　　 sleep-3SG
　　　　 'What is your son doing? Sleeping.'

　　 b. *Ag'a,*　　　　　　*ono*　 *nixe-i*　　 *bi*　 *ja:- ŋi?*
　　　　 elder.brother　　 how　 do-PRP　　 me　 cow-AL.1SG
　　　　 'Brother, how is my cow?'

(1648) a. *Si   j'e-uxi*   *mafa-la-i?*   *Iwana-tigi?*
　　　　 you what-LAT　　 man-V-2SG　　 Ivan-LAT
　　　　 'Whom are you marrying? John?'

　　 b. *Kuliga-tigi*　　　 *ni*　 *mafa-la-za?*
　　　　 snake-LAT　　　 who　 man-V-SUBJ
　　　　 'Who would marry a snake?'

On very rare occasions a question word may be separated from the verb by a verbal modifier.

(1649) *J'e-le*   *maŋga*   *uni:?*
        what-LOC   strong   hurt.PRP
        'Where does it hurt a lot?'

In copular constructions described in Chapter 17, when the subject is questioned, the *wh*-word precedes the copula and the predicative word is postposed.

(1650) *J'eu   bi:-ni   xekui?*
        what   be-3SG   hot
        'What is hot?'

In addition to position, the question word is marked by a rising intonation (3.5.4).

23.1.1.1. Questions to the noun phrase

Questions to noun phrases are formed with the interrogative pronouns *j'eu, j'e-* 'what' and *ni* 'who' in the corresponding case. The subject *wh*-word triggers 3rd person Singular agreement on the finite verb. Examples (1651) illustrate questions to the subject; examples (1652), (1653a), (1653b), (1653c), and (1653d) illustrate questions to the Accusative, Ablative, Dative, Instrumental, and Locative arguments, respectively. The question to an object of a postposition is shown in (1654).

(1651) a.   *J'eu*   *tiŋme-le:-ni?*
              what   fell-SING.PAST-3SG
              'What fell down?'
        b.   *Ni*   *gada-zaŋa-ni*   *xeleba-wa?*
              who   buy-FUT-3SG   bread-ACC
              'Who will buy bread?'

(1652) a.   *J'e-we*   *bu-zeŋe-ni*   *aziga-ziga-du?*
              what-ACC   give-FUT-3SG   girl-PL-DAT
              'What will he give to the girls?'
        b.   *J'e-we*   *ñoni:-ni*   *si*   *sita-i?*
              what-ACC   can-3SG   you   child-2SG
              'What can your son do?'

(1653) a.   *Ni:-digi*   *susa:-ni*   *ei*   *ñ'aula?*
            who-ABL   escape.PAST-3SG   this   boy
            'From whom did this boy escape?'

       b.   *Ni:-du*   *ge:*   *bi-s'e?*
            who-DAT   bad   be-PERF
            'Who felt bad?'

       c.   *Ni:-zi*   *xulise:-i*   *si?*
            who-INST   travel.PAST-2SG   you
            'With whom did you travel?'

       d.   *J'e-le*   *ñansule-i?*
            what-LOC   study-2SG
            'Where do you study?'

(1654) *J'eu*   *die-ni*   *wa'li-e-fi?*
       what   because-3SG   fight-PAST-1PL.IN
       'Because of what did we fight?'

The following example illustrates a question to the possessor noun phrase.

(1655) *Ei*   *j'eu*   *getu*   *'ana-ti*   *eje-ini?*
       this   what   PL   boat-3PL   float-3SG
       'Whose (Plural) boat is floating here?' (SK 666)

23.1.1.2. Questions to adverbial elements

The list of the interrogative adverbs can be found in 9.5.3, examples are presented in (1656).

(1656) a.   *Ali*   *ŋene-zeŋe-ti*   *wakca-i*   *ni:-ziga?*
            when   go-FUT-3PL   kill-PRP   man-PL
            'When will the hunters leave?'

       b.   *Si*   *ali*   *olokto-zoŋo-i?*
            you   when   cook-FUT-2SG
            'When will you cook?'

       c.   *Si*   *ono*   *muisi-si:?*
            you   how   think-IM.2SG
            'What do you think?'

       d.   *J'e-du*   *uta-wa*   *nixe:-i?*
            what-DAT   that-ACC   do.PAST-2SG
            'What did you do this for?'

23.1.1.3. Questioning with the interrogative pro-verb

The interrogative pro-verb *ja-* (9.5.4) co-occurs with the object question word (23.1.1.3.1) or is used as the only question word in the clause. Adverbial elements may also be questioned with various forms of the interrogative pro-verb (23.1.1.3.2).

23.1.1.3.1. Questions to the verbal phrase

Examples of questions where the interrogative pro-verb co-occurs with the Accusative object interrogative pronoun *j'e-we* 'what' are:

(1657) a. *J'e-we*   *ja:-i?*
         what-ACC   PROV-2SG
         'What were you doing?'
    b. *Si   j'e-we*   *ja-zaŋa-i?*
         you what-ACC   PROV-FUT-2SG
         'What will you do?'
    c. *Ono*   *ja:-i*   *mä:usa-i?*
         how   PROV.PAST-2SF   gun-REF
         'What did you do with your gun?' (SK 431)

Such questions refer to the whole verbal phrase and do not presuppose an answer that includes only the direct object. Thus, the answer to (1657) can be, for example, (1658a), but not (1658b).

(1658) a. *Olokto-zoŋo-i.*
         cook-FUT-1SG
         'I will cook.'
    b. **ugda-wa*
         boat-ACC
         'a boat'

23.1.1.3.2. Questions to adverbials

When the interrogative pro-verb is the only interrogative word in the sentence, its various morphological forms express various, normally adverbial, interrogative meanings. For example, the interrogative pro-verb in the Directive form corresponds to the meaning 'go for which reason?' (1659). When used in the subordinate clause the Purposive Converb of the interrogative pro-verb corresponds to the meaning 'what for?' (1660), and the directive Infinitive renders the meaning 'why' (1661).

(1659) *Si   jaŋ-na-sa:-i*   *min-tigi?*
      you PROV-DIR-EXP.PAST-2SG   me-LAT
      'What did you come to me for?'

(1660) *J'e-du*   *b'ata-ŋi-fi*   *ja-la:-m(i)*
      what-DAT   boy-AL-REF.PL   PROV-PURP-SS
      wa-kca-i si   *uta-wa?*
      kill-DES-2SG   that-ACC
      'Why and for what do you want to kill our only son?' (K 190)

(1661) a.   *J'e-ne-mi*   *gele-i*   *si*   *ñoŋo-wo?*
          what-DIR-INF   ask-2SG   you   glue-ACC
          'Why are you asking for glue?'
      b.   *J'e-ne-mi*   *kumtesi:*   *si?*
          what-DIR-INF   turn.2SG   you
          'Why do you turn over?'

23.1.1.4. Questions to modifiers

Any constituents of the noun phrase may be questioned. The question words *j'eu* 'what sort of', and *ni* 'whose' questioning a possessive modifier require that the head noun be marked by the 3ʳᵈ person Singular Possessive affix. On the possessive construction see 13.1.

(1662) a.   *J'eu*   *mo:-ni*   *asi*   *gugda?*
          what   tree-3SG   very   tall
          'What is this very tall tree?'
      b.   *J'eu*   *ule:-we-ni*   *si*   *olokto:-i?*
          what   meat-ACC-3SG   you   cook.PAST-2SG
          'What sort of meat did you cook?'

Questions to non-possessive modifiers are formed with the interrogative pro-adjectives (9.5.2) such as *ono-fi, onob(u)i* 'which' (Northern dialect), *ali-fi* 'from what time', *j'e-me* 'which, made of what', *j'eu-ze* 'which side', and *adi* 'how many, how much'.

(1663) a.   *Adi-ti*   *zugdi-du*   *si*   *bagdi:?*
          how.many-ORD   house-DAT   you   live.2SG
          'In which (number) house do you live?'
      b.   *J'e-me*   *bui*   *sagdi?*
          what-ADJ   animal   big
          'Which animal is the biggest?'

   c.   *Ono-fi*   *tege-we*   *gazi-e-i*   *si?*
        how-ADJ   gown-ACC   bring-PAST-2SG   you
        'Which gown did you bring?'

   d.   *Onobui*   *boko*   *tege-ni?*
        which   color   gown-3SG
        'What color is his gown?' (SK 731)

   c.   *J'eu-ze*   *e:-le-ni*   *käŋa*   *diga-ini?*
        what-N   side-LOC-3SG deer   ear-3SG
        'On which side (of the river) does the deer graze?' (SK 277)

23.1.1.5. Questions to copular constructions

Questions to predicative words expressed by various noun phrases are formed by substituting the interrogative pronoun *j'eu* 'what' in the corresponding case form for the questioned constituent. In (1664) we exemplify questions to the nominative noun phrase (construction described in 17.2.1.2), in (1665) questions to adverbial predicative words (17.2.2.2.3), and in (1666) questions to the predicative word of the comparative postpositional construction (17.2.2.2.4).

(1664) a. *Si*   *gegbi:*   *j'eu?*
          you name.2SG   what
          'What is your name?'

      b. *Abuga-i*   *gegbi-ni*   *j'eu*   *bi-s'e?*
          father-2SG name-3SG   what   be-PERF
          'What was the name of your father?'

      c. *Si* *Iwana-zi*   *i:-mule*   *bi-u*
          you Ivan-INST   what-N   be-2PL
          za:-mule-s   *xa:-mule-s?*
          cousin-N-DIS   brother-N-DIS
          'Who are you and Ivan to one another, cousins or brothers?'

(1665) a. *Anna*   *i:-le*   *bi:-ni?*
          Anna   what-LOC   be-3SG
          'Where is Anna?'

      b. *J'e-digi*   *keige?*
          what-ABL   cat
          'Where is the cat from?'

(1666) *J'eu* *bede*   *ede:-mi*   *bi?*
       what like   become.PAST-1SG   me
       'What happened to me?'

In adjectival (17.2.2.1.1), possessive (17.2.2.3), and destinative (17.2.2.1.2) copular constructions, the question word cannot replace the predicative element. Instead, the construction is transformed: the *wh*-word functions as a prenominal modifier of the subject, while the modified noun occupies the predicative position (1667). The head noun of the possessive (1668) or the destinative (1669) noun phrase corresponds to the finite predicate and takes the possessive marker.

(1667) a. *Ei   ono-fi   mo:?*
this how-ADJ   tree
'What sort of tree is it?'

b. *Ali-fi   ña:?   Zua-fi?*
when-ADJ   skin   summer-ADJ
'What sort of skin? A summer one?'

c. *J'e-me   tege?*
what-ADJ   gown
'What is the gown made of?'

d. *J'e-me   seu?   Kuŋka-ma   seu?*
what-ADJ   oar   cedar-ADJ   oar
'What is the oar made of? Of cedar?' (K 133)

(1668) a. *Ni   kusige-ni?*
who   knife-3SG
'Whose is this knife?'

b. *J'eu   xokto-ni?*
what   footstep-3SG
'Whose are the footsteps?'

(1669) a. *Ni   kusige-ne-ni?*
who   knife-DEST-3SG
'For whom is the knife?'

b. *J'eu   xei-ne-ni?*
what   handle-DEST-3SG
'What is the handle for?'

23.1.1.6. The question word 'why'

The question word *i:mi/j'emi* 'why' is the only *wh*-word that need not be located in the immediately preverbal position: it is usually clause-initial and can be separated from the verb by other lexical material (1670). However, it may also be strictly preverbal, as in (1671).

(1670) a.   *B'ata*   *teu*   *muisi-e-ni*   *i:mi*   *činda* *ute*
             boy   all   think-PAST-3SG   why   bird   that
             bede diaŋ-ki-ni.
             like say-PAST-3SG
             'The boy was thinking all the time why the bird spoke like this.'
             (K 168)

      b.   *I:mi*   *ketu*   *tuge-zi*   *eme-gi:?*
            Why   very   quick-INST   come-REP.2SG
            'Why did you return very quickly?' (K 166)

      c.   *J'emi*   *si*   *dili:*   *kapta-i?*
            why   you   head.REF   wrap-2SG
            'Why did you wrap up your head?'

(1671) *Kanda*   *mafa*   *j'emi* *bude:-ni?*   *Lali-mi*
       Kanda   old.man   why   die.PAST-3SG   starve-INF
       bude:-ni.
       die.PAST-3SG
       'What did the old man Kanda die from? From hunger.'

The expression *ono bi-mi* 'why' (literally: 'being how') seems to behave in the same way, that is, it does not have to be immediately preverbal:

(1672) *Ono*   *bi-mi*   *wopti-we*   *kimpigi-e-ti?*
       how   be-INF   door-ACC   close-PAST-3PL
       'Why did they close the door?'

21.1.1.7. Multiple *wh*-questions

Multiple *wh*-questions are allowed, although rarely; an example is (1673).

(1673) a.   *J'e-we*   *ni-tigi*   *diaŋ-ki-ni?*
           what-ACC   who-LAT   say-PAST-3SG
           'What did he say, and to whom?'

      b.   *Ono*   *imi*   *ute*   *bede*   *ede-i?*
           how   why   that   like   become-PP
           'How and why did it happen like this?'

The examples below illustrate multiple embedded questions.

(1674) a.   *Uta bede*   *gusi-mi*   *b'ata-ma*   *sita-ziga*
            that like   play-INF   boy-ADJ   child-PL
            ŋiča-digi   *sa:-iti*   *ono-do*   *onobui*
            small-ABL   know-3PL   how-FOC   which
            bui   *xokčo-i-we-ni,*   *ono-do*
            animal   attack-PRP-ACC-3SG   how-FOC
            wakča-i-we.
            hunt-PRP-ACC
            'Playing like this boys learn how each animal attacks and how one
            should hunt.' (SKX 302)

       b.   *Sagdi*   *ma:ma*   *tu:*   *ise-si:-ni*
            big   grandmother   all   see-IM.PRP-3SG
            ni-de   *ono*   *sita-wa*   *igi-si:-we-ni.*
            who-IND   how   child-ACC   feed-IIM.PRP-ACC-3SG
            'The great grandmother always looks at who brings up children,
            and in which way.' (SKX 304)

We do not have evidence for any superiority effects in multiple *wh*-questions.

23.1.2. Yes-no questions

Yes-no questions are not marked by any additional morphological means or
changes in word order compared to the corresponding declarative sentence.
They are differentiated from them only by intonational patterns: the last word is
marked by a higher and more prolonged intonational contour (3.6.4). The finite
verb normally occupies the clause-final position. Examples (1675) show
ordinary yes-no questions, and examples (1676) illustrate negative yes-no
questions.

(1675) a.   *Nua-ni*   *tue*   *eme-gi-ze?*
            he-3SG   winter   come-REP-SUBJ
            'Will he come in winter?'

       b.   *Xeleba*   *bie?*   *Anči.*
            bread   be.PRES.HAB   no
            'Is there any bread? No.'

       c.   *Bu*   *sun-dule*   *aŋa-la-si-ze-u?*
            we.EX   you.PL-LOC   night.shelter-V-IM-SUBJ-1PL.EX
            'Can we spend the night in your house?'

(1676) a.   *Si*   *e-i*   *sa:?*
            you NEG-2SG   know
            'Don't you know?'

b. *Wasia   e-s'e   mamasa-la?*
    Vasia   NEG-PERF   man-V
    'Hasn't Vasia married?'

c. *Si   kusige-le   anči   bie?*
    you knife-LOC   no   be.PRES.HAB
    'Don't you have a knife?'

23.1.3. Contrastive questions

Contrastive questions are marked by the focus clitic particle *-nA* or *-nu* following a contrastive element. In *wh*-questions the particle is used when the subject questioned is in explicit or implicit contrast with certain other elements (1677). In polar questions it normally follows a focused predicate (1678), while (1679) shows a focus on the spatial adverb. The contrastive word is marked by a rise in intonation, but the clitic does not attract it to itself.

(1677) a. *Si   min-e-we   dian-a-i   bi-s'e-i*
          you me-0-ACC   say-0-PRP   be-PERF-2SG
          si-ne   ono   ja:-i?
          you-CONT   how   PROV-2SG
          'You were cursing me, and what are YOU (yourself) doing?'
          (K 157)

b. *Ei-ne   j'eu   bäsa-ni?*
    this-CONT   what   river-3SG
    'And what is THIS river called?' (as opposed to the previous one)
    (K 153)

c. *Dili-ni-ne   ile   bi:-ni?*
    head-3SG-CONT   where   be-3SG
    'And where is HIS HEAD?'

d. *Xuda-na?*
    fur-CONT
    'And what about the FUR?'

e. *Si-ne   tuxi   j'eu   nixe:-i?*
    you-CONT   sledge what   do.PAST-2SG
    'Sledge, what did YOU do?'

(1678) a. *Begdi: xua-nda:-ni-nu?*
          leg.REF   cut-SEM-PAST-3SG-CONT
          'Did she cut off her leg?' (K 154)

b. *Ni:-je,   emus'e bagdi:-nu?*
    man-VOC   alone   live.2SG-CONT
    'Man, do you live on your own?' (K 165)

c. *Iwana   zugdi-du   bi-s'e-nu?*
   Ivan   house-DAT   be-PERF-CONT
   'Was Ivan at home?'

d. *Sin-du   xekui-nu?*
   you-DAT   hot-CONT
   'Do you feel hot?'

e. *Uti ni: niŋka-nu?*
   that man   Chinese-CONT
   'Is this man Chinese?'

f. *Imexi-nu   xeleba?*
   new-CONT   bread
   'Is the bread fresh?'

(1679) *Si   bagä:-za-nu   bi-s'e-i?*
       you   other-N-CONT   be-PERF-2SG
       'Were you on the other side (of the river)?'

The contrastive question particle *-nu* attached to the predicate can also express a rhetorical question, for example:

(1680) *Bi   tukti-ze-mi   sin-du   ata-mi*
       me climb-SUBJ-1SG   you-DAT   NEG.SUBJ-1SG
       tugbu-nu   seutige-we?
       drop-CONT   nut-ACC
       'I will climb up, won't I drop a nut for you?'

23.1.4. Alternative questions

There are several types of alternative questions. None of these types is formed with only one disjunctive element (such as *or* in English). Instead two disjunctive elements are used. Intonation typically rises at the end of the first disjunct and falls at the end of the sentence.

23.1.4.1. Alternative questions with the pro-verb

The alternative question can be formed with the pro-verb *ja-* as the second disjunct. The pro-verb takes the same morphological form as the finite verb in the first disjunct: in (1681a) they are both in the 2nd person Singular Future, in (1681b) in the 3rd person Singular Present. This type is used when the alternatives are described by the same verb in a positive and a negative form.

(1681) a.   *Si   eme-zeŋe-i*   *ja-zaŋa-i?*
         you come-FUT-2SG   PROV-FUT-2SG
         'Will you come or not?'

        b.   *Tigde-ini   ja:-ini?*
         rain-3SG   PROV-3SG
         'Is it raining or not?'

23.1.4.1. Alternative question with the particle *-As(i) ... -As(i)* 'either ... or'

The alternative question may be formed with the disjunctive particle *-As(i) ...
-As(i)* 'either ... or' (for the use of this particle in declarative disjunctive
sentences see Chapter 18). It follows the finite verb in the first disjunct and the
interrogative pro-verb *ja:-* present in the second disjunct in the same
morphological form (1682). Less frequently the disjunctive particle *-As(i)*
follows only the last disjunct (1683).

(1682) a.   *Si   muisi:-si*   *ono*   *nixe-du-ze*   *ŋene-du-ze:-s*
         you think-PC.2SG how   do-PL-SUBJ   go-PL-SUBJ-DIS
         ja-du-ze:-s.
         PROV-PL-SUBJ-DIS
         'According to you, what will they do, will they go or not?'

        b.   *Eineŋi*   *kino*   *bi-ze:-s*   *ja-za:-s?*
         today   movie be-SUBJ-DIS   PROV-SUBJ-DIS
         'Will there be a movie today or not?'

(1683) a.   *J'e-we*   *ja-zaŋa-i?*   *'Ana-na-mi*
         what-ACC PROV-FUT-2SG   boat-DEST-REF
         o:-zaŋa-ie,   *utuŋgie-ne-mi*   *o:-zaŋa-i-esi?*
         make-FUT-2SG   canoe-DEST-REF   make-FUT-2SG-DIC
         'What will you make (for yourself) – a l(large) boat or a canoe?'
         (SK 395)

        b.   *J'e-we*   *ja:-i?*   *ŋua-i,*   *etete-i,*
         what-ACC PROV-2SG   sleep-2SG   work-2SG
         gäŋda-gi:-esi?
         idle-REP.2SG-DIS
         'What are you doing? Are you sleeping, working, or idling again?'
         (SK 394)

If the disjunction applies to a non-predicate constituent, this is also marked by
the particle *-As(i) ... -As(i)*, which follows the disjoint constituents. In such a
case the sentence contains only one finite predicate.

(1684) a.   *J'e-we   xokto-ni   käŋa:-s   ogbö:-s?*
　　　　　　what-ACC   footstep-3SG   deer-DIS   elk-DIS
　　　　　　'Whose footsteps are these: a deer's or an elk's?'

　　　 b.   *Si   bugdi: i:-zi   wa:-i*
　　　　　　you leg.2SG   what-INST   kill-2SG
　　　　　　suese-zi-es   kusige-zi-es?
　　　　　　axe-INST-DIS   knife-INST-DIS
　　　　　　'What did you cut your leg with, an axe or a knife?'

　　　 c.   *Si   ei   zugdi-du   bi:-es   ei*
　　　　　　you this   house-DAT   be.2SG-DIS   this
　　　　　　gagda-du   bi-es?
　　　　　　other-DAT   be.2SG-DIS
　　　　　　'Do you live in this house or in another one?'

　　　 d.   *Si   Ima   bäsa-li-ni-es   Biki*
　　　　　　you Iman   river-PROL-3SG-DIS   Bikin
　　　　　　bäsa-li-ni-es   eine-i?
　　　　　　river-PROL-3SG-DIS   float-2SG
　　　　　　'Do you float on the river Iman or the river Bikin?'

　　　 e.   *Uti gegbeŋku   amta-ni   ono-fi-gde*
　　　　　　that berry   taste-3SG   how-ADJ-FOC
　　　　　　zej-es   zuj-es?
　　　　　　sour-DIS   sweet-DIS
　　　　　　'What sort of taste do these berries have – sour or sweet?'

　　　 f.   *Si   j'e-uxi   xulise-i   Iman-tigi-esi*
　　　　　　you what-LAT   go-1SG   Iman-LAT-DIS
　　　　　　Samarga-tigi-esi?
　　　　　　Samarga-LAT-DIS
　　　　　　'Where are you going – to Iman or to Samarga?'

23.1.4.2. Alternative questions with the particle *-nu* ... *-nu* 'either ... or'

The clitic particle *-nu*... *-nu* 'either ... or' expresses disjunction in questions. It seems basically to have the same meaning as the particle *-As(i)* ... *-As(i)*, although it is likely to render a greater degree of emphasis. Below it is shown following the predicate and the non-predicate constituent, although the former function is more typical of this particle.

(1685) a.   *Su   xulise:-u-nu   ja:-u-nu?*
　　　　　　you go.PAST-2PL-DIS   PROV.PAST-2PL-DIS
　　　　　　'Did you go or not?'

> b. *Si   timana   zikta-wa*
> you tomorrow   blueberry-ACC
>
> *gaŋ-na-zaŋa-i-nu?*   *ja-zaŋa-i-nu?*
> fetch-DIR-FUT-2SG-DIS   PROV-FUT-2SG-DIS
> 'Will you go to collect blueberries tomorrow?'
>
> c. *Iwana   eme-gi-ge-nu*   *ja:-nu?*
> Ivan   come-REP-PERF-DIS   PROV.PERF-DIS
> 'Has Ivan returned or not?'
>
> d. *Tiŋeni   kino   bi-s'e-nu*   *ja:-nu?*
> yesterday   movie   be-PERF-DIS   PROV.PERF-DIS
> 'Was there a movie yesterday or not?'

(1686) *I:-le   una-za-i   amä:-za-la-nu*
what-LOC   travel-SUBJ-2SG   back-N-LOC-DIS
zulie-ze-le-nu?
front-N-LOC-DIS
'Where will you travel: in the front or in the back?' (K 153)

23.1.4.3. Alternative questions with negation

If in an alternative question the second negative alternative is emphasized, this is expressed in the second disjunct with negative verb *e-* which takes the morphological form of the content verb, or the negative auxiliary *anči*. Both the finite verb in the first disjunct and the negative verb in the second disjunct are followed by the clitic particle *-nu ... -nu*.

(1687) *Xeleba   bie-nu*   *anči-nu?*
bread   be.PRES.HAB-CONT   no-CONT
'Is there bread or not?'

Less frequently, in alternative questions with negation the disjunctive particle *-As(i)* follows only the second (negative) disjunct:

(1688) a. *Iwana   sin-du   kusige-we   bu-ge*
Ivan   you-DAT   knife-ACC   give-PERF
e-si-ni   bu-o:s?
NEG-PAST-3SG   give-DIS
'Did Ivan give you the knife or not?'

> b. *Koko   ŋen'e   e-si-ni   ŋene:-s?*
> Koko   go.PERF   NEG-PAST-3SG   go-DIS
> 'Did Koko leave or not?'

23.1.4.4. Alternative questions with juxtaposition

Alternative questions may be formed by the mere juxtaposition of disjoint constituents.

(1689) a. *J'eu* *digan-a-ini,* *ni:* *j'eu* *činda-ni*
   what say-0-3SG man what bird-3SG
   digan-a-ini?
   speak-0-3SG
   'Who is speaking, is a man or some bird speaking?' (K 122)

  b. *Ono* *ja-za-fi?*   *Guli-ne-ze-fi,*
   how PROV-SUBJ-1PL.IN leave-DIR-SUBJ-1PL.IN
   ekei-ze-fi?
   stay-SUBJ-1PL.IN
   'What shall we do? Shall we leave or stay?' (SK 394)

23.1.5. Indirect questions

23.1.5.1. Finite clause

The finite subordinate clause is described in Chapter 18. In indirect constituent questions the question word immediately precedes the subordinate clause predicate. The question word (interrogative pronoun) may have the same form as regular question words used in direct questions (9.5). Alternatively, indirect questions may be formed with non-specific indefinite pronouns derived with the clitic particle *-dA* (9.6.2), which function here as interrogative pronouns (1691). In both cases, the subordinate clause is not followed by any evidential particles, even if this is required for the corresponding non-interrogative subordinate clauses (18.3.1).

(1690) a. *Si* *muisi-si:*   *ono* *nixe-ini?*
   you think-IM.2SG   how do-3SG
   'How do you think it will be?'

  b. *Ise-ne-je*   *ni* *eme:-ni.*
   look-DIR-IMP.2SG who come.PAST-3SG
   'Go and look at who has come.'

  c. *Nua-ni* *xauntasi-e-ni* *ono* *bie*   *Nina.*
   he-3SG ask-PAST-3SG how be.PRES.HAB Nina
   'She asked how Nina is.'

   d.   *Bi   ei-mi   sa: ono-fi   unugu*

        me   NEG-1SG   know   how-ADJ   disease

        bi:-ni.

        be-3SG

        'I don't know which disease he has.'

   e.   *Bi   ei-mi   sa: ono   bi-zeŋe-i.*

        me   NEG-1SG   know   how   be-FUT-1SG

        'I don't know how I will live.'

(1691) a.   *Bi   ise-ne-ze-mi   su   j'e-zi-de*

        me   see-DIR-SUBJ-1SG   you   what-INST-IND

        ŋele-kce:-u.

        be.afraid-DUR.PAST-2PL

        'I will go and see what you were afraid of.' (K 158)

   b.   *Nua-ni   ŋua-mi   t'osi:-ni   ono-do*

        he-3SG   sleep-INF   dream-3SG   how-IND

        ti:gisi:-ni   ñö:-wo.

        take-3SG   sable-ACC

        'He is dreaming about how he takes away the sables.'

   c.   *J'e-uxi-de   susa:-ni   ni-de   ei*

        what-LAT-IND   escape.PAST-3SG   who-IND   NEG

        sa:.

        know

        'Where she escaped to, nobody knows.' (K 164)

23.1.5.2. Non-finite clause

Non-finite participial complement clauses are addressed in length in Chapter 20. They are based on the Accusative forms of participles. In such clauses only non-specific indefinite pronouns with the particle *-dA* can be used in the interrogative function.

(1692) a.   *Si   min-tigi   ñoxoli gakpa-ja   bi*

        you me-LAT   first   shoot-IMP.2SG   me

        ise-lege-i   si   ono-do   gakpa-i-wa-i.

        see-PURP-1SG   you   how-IND   shoot-PRP-ACC-2SG

        'Shoot at me first, so I can see how you shoot.' (K 152)

   b.   *Düisi-je   j'e-we-de   dian-a-i-we-i.*

        listen-IMP.2SG   what-ACC-IND   say-0-PRP-ACC-1SG

        'Listen to what I am saying.'

c. *Adi-de*   *käsa*   *dieli:-we-ni*
   how.many-FOC   eagle   fly.PRP-ACC-3SG
   ni:-de   *e-ini*   *sa:.*
   who-IND   NEG-3SG   know
   'Nobody knows how long the eagle was flying.'

d. *Bi zoŋi-e-mi*   *abuga-i*   *ono-do*
   me   recall-PAST-1SG   father-1SG   how-IND
   wakca:-ma-ni.
   hunt.PP-ACC-3SG
   'I recalled how my father was hunting.'

e. *Bi gafai mo:-wo*   *ise:-mi*   *ono-do*
   me   thorny tree-ACC   see.PAST-1SG   how-IND
   gegbi-si:-we-ti   *ei-*   *sa:.*
   name-V.PRP-ACC-3PL   NEG-1SG   know
   'I saw a thorny tree, I don't know what it is called.'

f. *J'e-uxi-de*   *susa-zaŋa-ni*   *e-ini*   *sa:.*
   what-LAT-IND   escape-FUT-3SG   NEG-3SG   know
   'He doesn't know where he will escape to.'

23.1.5.3. Alternative indirect questions

Both for finite and non-finite subordinate clauses there are two types of
alternative questions: with the interrogative pro-verb and with the negative verb
in the second disjunct.

23.1.5.3.1. Alternative indirect question without negation

In non-finite subordinate complement clauses an alternative question is
expressed with the indefinite pro-verb *ja-* which takes the same morphological
form as the subordinate clause predicate (namely, the participle in the
Accusative). The disjunctive particle *-dA* ... *-dA* follows the subordinate clause
predicate and the second predicate expressed by the indefinite pro-verb *ja-*.
Although formally the clause is organized as an alternative question, questions
without negation in fact correspond semantically to indirect polar (yes-no)
questions ('whether'-questions).

(1693) a. *Iwana*   *xaundasi-e-ni*   *imo:-wo*
    Ivan   ask-PAST-3SG   butter-ACC
    gada:-ma-u-de   *ja:-ma-u-de.*
    buy.PP-ACC-1PL.EX-DIS   PROV.PP-ACC-1PL.EX-DIS
    'Ivan asked whether we bought butter.'

   b.   *Nua-ni*   *xaundasi-e-ni*   *bu*
          he-3SG   ask-PAST-3SG   we
          xulise:-me-u-de   *ja-ma-u-de.*
          travel.PP-ACC-1PL.EX-DIS   PROV.PP-ACC-1PL.EX-DIS
          'He asked whether we were traveling.'

   c.   *Saŋ-na-ja*   *magazina*
          know-DIR-IMP.2SG shop
          nientili-gi-e-me-n(i)-de   *ja-ma-n(i)-de.*
          open-REP-PP-ACC-3SG-DIS   PROV.PP-ACC-3SG-DIS
          'Go and ask whether the shop has opened.'

   d.   *Ise-ne*   *Sonia*   *eme-gi-e-me-n(i)-de*
          see-DIR   Sonja   come-REP-PP-ACC-3SG-DIS
          ja-ma-n(i)-de.
          PROV.PP-ACC-3SG-DIS
          'Go and see whether Sonja has come.'

   e.   *Saŋ-na*   *Sonia-tigi*   *timana*   *sata-wa*
          know-DIR   Sonya-LAT   tomorrow   sugar-ACC
          xuda-si:-we-n(i)-de   *ji:-we-n(i)-de.*
          fur-V.PRP-ACC-3SG-DIS   PROV.PRP-ACC-3SG-DIS
          'Ask Sonya whether they will sell sugar tomorrow.'

   f.   *Bi*   *ei-mi*   *sa:*   *eineŋi* *kino*
          me NEG-1SG   know   today   movie
          bi-zeŋe-we-n(i)-de   *ja-zaŋa-wa-n(i)-de.*
          be-FP-ACC-3SG-DIS   PROV-FP-ACC-3SG-DIS
          'I don't know whether there will be a movie today.'

In finite subordinate questions the disjunctive particle *-As(i) ... -As(i)* is used instead of the particle *-dA ... -dA*, so the finite indirect alternative question does not differ formally from the direct alternative question (23.1.4).

(1694) a.   *Xaundasi-je*   *ono*   *nixe-ze*   *guline-zeŋe-ni-es*
          ask-IMP.2SG   how   do-SUBJ   go-FUT-3SG-DIS
          ja-zaŋa-ni-es.
          PROV-FUT-3SG-DIS
          'Ask what he will do: will he go?'

     b.   *Bi* *ei-mi*   *sa:*   *o-du*   *niŋka*
          me NEG-1SG   know   this-DAT   Chinese
          bagdi-ze:-s   *ja-za:-s.*
          live-SUBJ-DIS   PROV-SUBJ-DIS
          'I don't know whether the Chinese people will live here.'

c. *Bi ei-mi   sa: timana-ni*
me NEG-1SG   now   tomorrow-3SG
ŋene-ze-fɪ-es   ja-za-fɪ-es
go-SUBJ-1PL.IN-DIS   PROV-SUBJ-1PL.IN-DIS
ba:-za   ge-tigi.
place-N   surface-LAT
'I don't know whether we will go to the forest tomorrow or not.'

23.1.5.3.2. Alternative indirect questions with negation

In alternative indirect questions with negation the negative alternative is highlighted and the negative verb *e-* functions as a predicate of the second disjunct. As in indirect alternative questions without negation, in non-finite clauses predicates in both disjuncts are marked with the particle *-dA ... -dA* (1695), while in the finite clause the particles *-As(i) ... -As(i)* (1696) or *-nu ... -nu* (1697) are present.

(1695) a. *Bi ei-mi   sa: nua-ni   tala-wa*
me NEG-1SG   know   he-3SG   raw.fish-ACC
aju-i-we-n(i)-de   e-i-we-n(i)-de.
like-PRP-ACC-3SG-DIS   NEG-PRP-ACC-3SG-DIS
'I don't know whether he likes raw fish or not.'

b. *Ni:-de   ei   sa: anana   ni:*
who-IND   NEG   know   long.ago   man
o-du   bi-si-me-n(i)-de
this-DAT   be-PP-ACC-3SG-DIS
e-si-me-n(i)-de.
NEG-PP-ACC-3SG-DIS
'Nobody knows whether people used to live here before or not.'

c. *Čala-i-we-ti-de*   *ei-we-ti-de*
want-PRP-ACC-3PL-DIS   NEG-ACC-3PL-DIS
xaundasi-je.
ask-IMP.2SG
'Ask whether they want (it) or not.'

(1696) a. *Ise-ne-je   zugdi-du   bi:-ni-es   anči*
see-DIR-IMP.2SG   house-DAT   be-3SG-DIS   no
bi:-ni-es   Iwan.
be-3SG-DIS   Ivan
'Go and see whether Ivan is at home or not.'

b. *Ise-ne-je   xeleba bie-s   anči-es.*
see-DIR-IMP.2SG   bread   be.PRES.HAB-DIS no-DIS
'Go and see whether or not there is any bread.'

(1697) *Memi*   *ise:-ni*   *tege*   *bie-nu*
         REF.ACC   see.PAST-3SG   gown   be.PRES.HAB-DIS
         anči-nu.
         no-DIS
         'She looked at herself to see whether or not she was wearing a gown.'
         (K 163)

23.1.5.4. Indirect yes-no questions

Indirect yes-no questions are formed by means of a particle *-dA* on the dependent predicate, cf.:

(1698) *Čai*   *xekui-we-ni-de*   *amtala-ja.*
         tea   hot-ACC-3SG-FOC   try-IMP.2SG
         'Try whether the tea is hot.' (SK 1036)

23.2. Negation

Except for some special constructions, Udihe does not make the formal difference between sentence negation and constituent negation. Examples of these two negation types are presented below in 23.2.1 and 23.2.2, respectively. In both cases, negation is expressed with the negative auxiliary verb *e-/ei-*, which precedes the content verb and may take various morphological forms, e.g. *e-si-ti etete-du* 'they were not working' <NEG-PAST-3PL work-PL>, *e-s'e-li etete* 'without having worked' <NEG-PERF-CC.SS work>. For more information on the conjugation of the negative verb and the form of the content verb in negative sentences see 7.3 and 7.1.4. In certain copular constructions negation is expressed by the impersonal copula *anči* 'no'.

     Normally, the negative verb immediately precedes the content verb; however, it is sometimes possible for it to be placed after the verbal stem, as below.

(1699) a.   *Nada*   *gida*   *bul'a-wa-ni*   *xai-ge-si*
           seven   spear   shaft-ACC-3SG   break-PERF-PC.SS
           bude e-zi-u.
           die NEG-IMP-2PL
           'Having broken the shafts of seven spears you won't die.' (SKX 84)
      b.   *ŋene-ze-mi*   *bi,*   *lali*   *e-lege-fi.*
           go-SUBJ-1SG   me   starve   NEG-PURP-1PL.IN
           'I should leave so we will not starve.'

It is occasionally possible to insert other lexical material between the negative auxiliary and the content verb, as is shown below. This is not a very frequent option, however. The constituent that can be inserted between the negative verb and the content verb is normally an oblique or indirect object (1700), or some kind of adjunct (1701).

(1700) a. *E-te-mi-ne*   *zugdi-tigi*   *i:mi*   *i:?*
          NEG-SUBJ-1SG-CONT   house-LAT   why   enter
          'Why don't you enter the house?' (K 158)

      b. *E-zi*   *min-zi*   *iñe*
          NEG-IMP.2SG   me-INST   laugh
          'Don't laugh at me.'

      c. *Mafa*   *amä:-wa-ni*   *dili-we-ni*
          bear   back-ACC-3SG   head-ACC-3SG
          e-iti   *a:nta-du*   *diga-wan-a.*
          NEG-3PL   woman-DAT   eat-CAUS-0
          'They don't let a woman eat a bear's back and head.' (SKX 308)

(1701) a. *E-zeŋe-fi*   *ute*   *nixe.*
          NEG-FUT-1PL.IN   that   do
          'We will not do it this way.'

      b. *E-zi*   *in'ei-zi*   *gusi.*
          NEG-IMP.2SG   dog-INST   play
          'Don't play with the dog,'

23.2.1. Sentence negation

23.2.1.1. Regular negation

Here we exemplify ordinary sentence negation (1702) and negation of some special constructions: the subjectless sentence (1703a), the agentless passive (1703b), the active agentless construction (1703c), the impersonal Necessitative (1703d), and the passive (1703e).

(1702) *Koko*   *ŋene:-ni*   *amä:-la-ni*   *ali-de*
        Koko   go.PP-3SG   after-LOC-3SG   when-IND
        e-s'e-i   *ise-gi-se.*
        NEG-PERF-1SG   see-REP-EXP
        'After Koko left, I never saw him again.'

(1703) a. *E-ini*   *tigde.*
          NEG-3SG   rain
          'It is not raining.'

b. *Ja:*   *xaba-wa-ni*   *e-u-zeŋe*   *umi.*
    cow   milk-ACC-2SG   NEG-PAS-FP   drink
    'One shouldn't drink the milk.'

c. *Ei   teuni-le*   *e-iti*   *egbesi.*
    this lake-LOC   NEG-3PL   swim
    'They don't swim in this lake.'

d. *E-u-zeŋe*   *diga*   *bi-si-ni.*
    NEG-PAS-FP   eat   be-PAST-3SG
    'One shouldn't have eaten.'

e. *Utemi*   *mo:kt'oi*   *o:kto'i* *do-ni-ni*
    therefore   bushes   grass   inside-DAT-3SG
    uta-wa   *e-u-ji*   *ise.*
    that-ACC   NEG-PAS-PRP   see
    'Therefore it can't be seen in the bushes and grass.' (Čarušin
    1935: 17)

The negative auxiliary typically takes scope over the fully derived verb
(preferred reading), but it also can refer to the verbal stem. Scope ambiguity is
demonstrated in the following example:

(1704) *Ei-de*   *teluŋu-si-wen-e.*
       NEG-FOC   story-V-CAUS-0
       'He does not let him to tell.'
       'He let him not to tell.'

23.2.1.2. Inchoative negative construction

Inchoative situations in the Past can be negated in two ways, depending on the
scope of negation. If the negation takes scope over the whole proposition ('did
not start doing something'), this is expressed formally in a regular manner:
with the negative verb in the Past and the content verb bearing the inchoative
suffix *-li-* (8.2.2.1). When the inchoative operator remains outside the scope of
negation ('started not doing something', that is, 'stopped doing something'),
Udihe uses a special construction. It indicates that the action no longer takes
place. The construction contains (in this order) the Present form of the negative
verb *e-i*, the bare stem of the content verb, and the verb *ede-* 'become' in the
Past tense with the corresponding agreement affix. Cf. (1705a) and (1705b):

(1705) a. *Ñ'aula*   *e-si-ni*   *soŋo-li.*
           child   NEG-PAST-3SG   cry-INC
           'The child didn't start crying.'

b. *Ñ'aula*   *ei*   *soŋo*   *ede:-ni.*
   child   NEG   cry   become.PAST-3SG
   'The child stopped crying.'

More examples of the inchoative negative construction are provided below. Note that in (1705d) the direct object is located between the negative verb and the content verb.

(1706) a.   *Bi*   *xunazi:*   *ei*   *ŋua*   *ede:-ni.*
        me   sister.1SG   NEG   sleep   become.PAST-3SG
        'My sister stopped sleeping.'
     b.   *Jej'e-u*   *ei*   *uni*   *ede:-ni.*
        grandfather-1PL.EX   NEG   sick   become.PAST-3SG
        'Our grandfather stopped being sick.'
     c.   *Eitene*   *ei-mi-de*   *oňo*   *ede:-mi.*
        now   NEG-1SG-FOC   write   become.PAST-1SG
        'I stopped writing now.'
     d.   *Ei-de*   *in'ei-we*   *koŋko*   *ede:-ni.*
        NEG-FOC   dog-ACC   beat   become.PAST-3SG
        'He stopped beating the dog.'

23.2.1.3. Alternating action

When the periphrastic construction of alternating action (7.11.1) includes the positive and the negative form of the same verb, negation is expressed with the Present stem of the negative verb, the content verb in a bare form, and the inflected Past or Perfect form of the verb *ede-* 'become'.

(1707) *Ba:-za*   *ge-tigi*   *ŋene-mu:i-ni*   *ei*
      place-N   surface-LAT   go-DES-3SG   NEG
      ŋene-mu:i   *ed'e.*
      go-DES   become.PERF
      'He sometimes wants to go to the forest, and sometimes does not want to.'

23.2.1.4. Negation of state

The stative negative construction is formed analytically with the copular verb *bi-* in the corresponding personal form and the content verb: a stem followed by the contrastive clitic particle *-gdA* (12.1.1.8).

(1708) a. *Nua-ni*   *tu:*   *tu:*   *ŋene-gde*   *bi:-ni.*
       he-3SG   all   all   go-FOC   be-3SG
       'He is not coming for a long time.'
     b. *Bi*   *jexe-gde*   *bi-mi.*
       me   sing-FOC   be-1SG
       'I don't sing.'
     c. *Eineŋi*   *diga-gde*   *bi:-ni.*
       today   eat-FOC   be-3SG
       'He does not eat today.'

23.2.1.5. Copular constructions

There exist five formally different ways of negating copular clauses (Chapter 17) depending on the semantics and the formal organization of the construction.

23.2.1.5.1. Negation of existential and possessive constructions

Existential (17.2.1.3) and possessive (17.2.1.4) constructions, which require the Habitual impersonal copula *bie* in declarative sentences, are negated with the impersonal existential negation *anči* 'there is no, there are no' in various temporal forms (see 7.1.4). The existential meaning is shown in (1709) for the Present tense, in (1710) for the Past tense, and in (1711) for the Subjunctive. The negative possessive construction is shown in (1712).

(1709) a. *O-du*   *tue*   *ima:*   *anči.*
       this-DAT   winter   snow   no
       'There is no snow here in winter.'
     b. *Min-du*   *sata*   *bie*   *s'ei-de*   *anči.*
       me-DAT   sugar   be.PRES.HAB   salt-FOC   no
       'I have sugar, but no salt.'

(1710) a. *Sele-gi-e-ni*   *ni:-de*   *anči*
       wake-REP-PAST-3SG   man-IND   no
       bi-si-ni.
       be-PAST-3SG
       'He woke up and nobody was there.' (K 176)
     b. *Anna*   *zugdi-du*   *anči*   *bi-s'e.*
       Anna   house-DAT   no   be-PERF
       'Anna was not at home.'

(1711) *Timana*   *Anna*   *zugdi-du*   *anči*   *bi-ze.*
        tomorrow   Anna   house-DAT   no   be-SUBJ
        'Tomorrow Anna won't be at home.'

(1712) a.   *Nua-ni*   *unugu-ni*   *anči.*
           he-3SG   disease-3SG   no
           'He does not have a disease.'
      b.   *Bi* *abuga-i*   *anči.*
           me father-1SG   no
           'I don't have a father.'
      c.   *Uti ni:-le*   *omo*   *gagda*   *ŋala-ni*   *anči.*
           that man-LOC   one   another   arm-3SG   no
           'This man does not have one arm.'

Existential and possessive copular constructions with the copula *ede-* 'become' are negated with the negative copula *anči* (often with the focus particle *–gdA*) and the verb *ede-* in the corresponding form. The resulting meaning is 'remain without', 'disappear'.

(1713) a.   *Eitene*   *dawa* *o-du*   *anči*   *ede:-ni.*
           now   salmon this-DAT   no   become.PAST-3SG
           'In those days no salmon remained.'
      b.   *Min-dule*   *mo:-do*   *anči*   *ede:-ni.*
           me-LOC   wood-FOC   no   become.PAST-3SG
           'I remained without wood.'
      c.   *E:xi*   *ic'a*   *ede:-ni,*   *anči*
           frog   small   become.PAST-3SG   no
           ede:-ni.
           become.PAST-3SG
           'The frog became small (and) disappeared.'

23.2.1.5.2. Negation of habitual constructions

Copular constructions with the habitual meaning (17.1.2.2) are negated with the uninflected Present stem of the negative verb *ei* in combination with the Habitual form of the verb 'be' *bie*. This type of negation applies to adjectival or nominal constructions with a habitual or generic meaning (1714) including subjectless constructions (1715), as well as to destinative participial constructions (1716), and constructions of alienable possession (1717).

(1714) a.   *Ei* *mo:*   *gugda* *ei*   *bie.*
           this tree   tall   NEG   be.PRES.HAB
           'This tree is not tall.'

b. *Bi   uñapti: aisi   ei   bie.*
me   ring.1SG   gold   NEG   be.PRES.HAB
'My ring is not gold.'

c. *Bi   ge:-i   ei   bie.*
me   fault-1SG   NEG   be.PRES.HAB
'I am not guilty.' (SK 259)

(1715) a. *Go:-do   ei   bie.*
long-FOC   NEG   be.PRES.HAB
'It wasn't long.'

b. *Xakti   ei   bie.*
dark   NEG   be.PRES.HAB
'It is not dark.'

(1716) *Odekolona   umi-kči   ei   bie.*
eau.de.cologne   drink-DP   NEG   be.PRES.HAB
'Eau de cologne is not for drinking.'

(1717) *Ei   oloxi   siniŋi   ei   bie.*
this squirrel   yours   NEG   be.PRES.HAB
'This squirrel is not yours.'

23.2.1.5.3. Negation of a construction with a personal copula

Copular constructions that express a temporal state and normally require a
personal non-habitual copula (17.1.1) are negated with the negative verb *e-* in
the corresponding personal form and the content verb 'be' in the form *bie*. This
negation type is, therefore, formally similar to the negation of non-copular
constructions (23.2.1.1). In (1718) the negative adjectival construction with
non-habitual copula is illustrated, in (1719) the construction with a quantifier,
in (1720) the adverbial construction, in (1721) the nominal copular
construction, and in (1722) the resultative construction. In adjectival
constructions the adjective may precede the negative verb as in (1718a), but it
may also be located between the negative verb and the verb *bie*, as in (1718b)
and (1718c).

(1718) a. *Si   zueze-i   imexi   e-ini   bie.*
you table-2SG   new   NEG-3SG   be.PRES.HAB
'Your table is not new.'

b. *Nua-ni*   *uga-ni*   *e-ini*   *lämugas'a*
   he-3SG   voice-3SG   NEG-3SG   high
   bie.
   be.PRES.HAB
   'His voice is not high.'

c. *Ei xeku*   *e-ini*   *umac'a*   *bie.*
   this rope   NEG-3SG   short   be.PRES.HAB
   'This rope is not short.'

(1719) *O-du*   *sugdä: egdi*   *e-ini*   *bie.*
    this-DAT   fish   much   NEG-3SG   be.PRES.HAB
    'There are not many fish here.'

(1720) *Go:* *e-zeŋe-i*   *bie*   *o-du.*
    long   NEG-FUT-1SG   be.PRES.HAB   this-DAT
    'I won't be here long.' (K 159)

(1721) a. *Na:*   *ni:-ni*   *ei-mi*   *bie.*
      earth   man-3SG   NEG-1SG   be.PRES.HAB
      'I am not an earth person.'

b. *Pakula*   *xuda-si:*   *ni:* *e-ini*
   Pakula   fur-V.PRP   man   NEG-3SG
   bie.
   be.PRES.HAB
   'Pakula is not a merchant.'

(1722) *Sugdä:-wa*   *e:-ktu*   *e-ini*   *bie.*
    fish-ACC   clean-RES   NEG-3SG   be.PRES.HAB
    'The fish is not cleaned.'

An example of the negative copular construction in the subordinate clause in is (1582).

(1723) *Si bi anda-i*   *ei*   *bie*   *bi-si*   *bi*
    you me friend-2SG   NEG   be.PRES.HAB   be-PAST   me
    sin-e-we   *e-muse-i-de*   *ceze.*
    you-0-ACC   NEG-COND-1SG-FOC   believe
    'If you were not my friend I would not believe you.'

23.2.1.5.4. Negation of the Proprietive

The Proprietive forms with the suffix *-xi* (4.3.1) are negated in a special way. The Proprietive forms are not present in the negative construction. Instead, the

possessed noun in the Partitive is combined with the impersonal copula *anči*. As in the non-negative counterpart, the construction in question does not contain any possessive noun phrase. However, as demonstrated in (1725), the Partitive can be formed from the nominal stem augmented by the suffix of inalienable possession *-ŋi-* .

(1724) a. *Nua-ni   kesi-le   anči.*
           he-3SG   luck-PART   no
           'He does not have luck.'

       b. *Bi   ag'a-i   omo   gagda   bugdi-le   anči.*
           me   brother-1SG   one   another   leg-PART   no
           'My brother does not have one leg.'

       c. *Timana   bi   eke-le   anči   bi-zeŋe-i.*
           tomorrow   me   time-PART   no   be-FUT-1SG
           'I will not have time tomorrow.'

(1725) *Saina   zä:-ŋi-le   anči   bi:-ni.*
       perhaps   money-AL-PART   no   be-3SG
       'Perhaps he does not have any money.'

In (1726) the copula *ede-* 'become' is illustrated within the construction in question.

(1726) a. *Bu   mo:-lo   anči   ede:-mu.*
           we   wood-PART   no   become.PAST-1PL.EX
           'We remained without wood.'

       b. *Nua-ni   zä:-la   anči   ede:-ni.*
           he-3SG   money-PART   no   become.PAST-3SG
           'He remained without money.'

Note that proprietive adjectives in *-xi* are negated following the pattern in 23.2.1.5.3, cf.:

(1727) *Nua-ni   meje-xi   e-ini   bie.*
       he-3SG   mind-ADJ   NEG-3SG   be.PRES.HAB
       'He is not clever.'

23.2.1.5.5. Desiderative construction

The desiderative copular construction (17.2.3.2) is negated by the uninflected Present stem of the negative verb *ei*, which precedes the Desiderative noun. This is illustrated in (1728), while (1729) shows the same construction with the copula *ede-* 'become'.

(1728) a.   *Ei-de*   *diga-mugdi.*
       NEG-FOC   eat-DESN
       'He does not want to eat.'

    b.   *Eitene*   *ei-de*   *diga-mugdi.*
       now   NEG-FOC   eat-DESN
       'Now I don't want to eat.'

(1729) a.   *Ei-de*   *umi-mugdi*   *ede:-ni.*
       NEG-FOC   drink-DESN   become.PAST-3SG
       'He stopped feeling thirsty.'

    b.   *W'ataŋi*   *nua-ni*   *diga-mugdi*   *bi-si-ni,*
       before   he-3SG   eat-DESN   be-PAST-3SG
       eitene   *ei-de*   *diga-mugdi*   *ede:-ni.*
       now   NEG-FOC   eat-DESI   become.PAST-3SG
       'Previously he wanted to eat, now he has stopped wanting to.'

23.2.1.6. Subordinate clause

Negation in the subordinate clause is formally organized in the same way as in the main clause, that is, with the negative verb in the corresponding morphological form and the bare stem of the content verb. In the following examples the subordinate clause is marked with square brackets in the glosses.

23.2.1.6.1. Complement clause

Examples of the copular (1730a) and non-copular (1730b) participial complement clause are:

(1730) a.   *Bi   sa:-mi*   *nua-ti*   *elu*   *ni:*
       me   know-1SG   [he-3PL   fair   man
       e-i-we-ti   *bie.*
       NEG-PRP-ACC-3PL   be.PRES.HAB]
       'I know that they are not fair people.'

    b.   *Bi   ise:-mi*   *si*   *e-i-we-i*
       me   see.PAST-1SG   [you   NEG-PRP-ACC-2SG
       etete.
       work]
       'I saw that you didn't work.'

23.2.1.6.2. Relative clause

Example of headed (1731) and headless (1732) negative relative clauses are:

(1731) a. *Uti*   *ni:-we*   *sa:-wu-i*   *ba:-za*
           that   man-ACC   know-PAS-2SG   place-N
           ge-le-ni   *e-si-me-ni*   *xuli.*
           [surface-LOC-3SG   NEG-PP-ACC-3SG   go]
           'You can recognize the man who has (never) gone to the forest.'

     b. *Si*   *ugai*   *ei*   *bie*   *sina-wa*
         you [heavy NEG   be.PRP.HAB]   sack-ACC
         zawa:-i.
         take.PAST-2SG
         'You took a sack, a not heavy one.'

     c. *Suŋta*   *ei*   *bie*   *joxoso-wo*   *olonzi*
         [deep   NEG   PRP.HAB]   river-ACC   fording
         dau-zeŋe-fi.
         cross-FUT-1PL.IN
         'We will cross by foot a river which is not deep.'

     d. *sama*   *e-i*   *bie*   *ni:*
         sahman   NEG-PRP   be.PRES.HAB   man
         'a person who is not a shaman' (SK 157)

(1732) *Nede-je*   *e-si-me-ni*   *ada*   *padig'a.*
       put-IMP.2SG   [NEG-PP-ACC-3SG   get.ripe]   separately
       'Put those that are not ripe separately (about tomatoes).'

In the Present tense copular relative clause the content verb 'be' co-occurs with the negative verb in the form of either a regular Present Participle *bi:*(-) or the Habitual form *bie*. The former is normally found within the internal relative clause (19.2) in which the relative clause predicate (participle) follows the relativized noun and is marked by case and personal markers. Examples (1733)–(1735) show that the case suffix is either added to the bare participle form (examples (a)) or to the negative auxiliary participle (examples (b)).

(1733) a. *Bi* *ei-mi*   *aju*   *ni:*   *elu*   *e-iti*
           me NEG-1SG   like   [man   fair   NEG-3PL
           bi:-we.
           be.PRP-ACC]
           'I don't like people who are not fair.'

b. *Bi   ei-mi   aju   ni: elu*
   me   NEG-1SG   ike   man   fair
   e-i-we-ti   bie.
   NEG-PRP-ACC-3PL   be.PRES.HAB]
   'I don't like people who are not fair.'

(1734) a. *Bi   sa:-mi   ni:-we   lusa*
          me   know-1SG   man-ACC   [Russian
          keje-we-ni   e-iti
          language-ACC-3SG   NEG.PRP-3PL
          egze-we.
          understand-ACC]
          'I know people who don't understand Russian.'

       b. *Bi   sa:-mi   ni:-we   lusa*
          me   know-1SG   [man-ACC   Russian
          keje-we-ni   e-i-we-ti
          language-ACC-3SG   NEG-PRP-ACC-3PL
          egze.
          understand]
          'I know people who don't understand Russian.'

(1735) a. *Bi   dia-si-e-mi   gabzi   ni:*
          me   say-IM-PAST-1SG   [cheerful   man
          ei   bie-zi.
          NEG   be.PRP.HAB-INST]
          'I talked to a man who was not cheerful.'

       b. *Bi   sa:-mi   gugda   mo: e-i-we-ni*
          me   know   [tall   tree   NEG-PRP-ACC-3SG
          bie.
          be.PRES.HAB]
          'I know a tree which is not tall.'

23.2.1.6.3. Adverbial clauses

The following examples demonstrate different types of adverbial clauses with the negative verb in the corresponding form: the Purposive Converb (1736), the Conditional Converb (1737), and the Infinitive in the adverbial clause of manner (1738).

(1736) a. *ŋene-ze-mi   bi   lali   e-lege-fi.*
          go-SUBJ-1SG   me   [starve NEG-PURP-1PL.IN]
          'I will go so that we don't starve.'

b. *Bi ugda-i*   *ñusisi-zeŋe-i*   *dogbo*
    me boat-1SG   resin-FUT-1SG   [night
    e-lege-ni   *ise-pte-i.*
    NEG-PURP-3SG   see-DEC-PRP]
    'I will resin the boat, so that it won't be seen at night.'

c. *Bu e-lege-u*   *ŋua*   *eniŋe*
    [we NEG-PURP-1PL.EX   sleep] mother
    imaŋku-we   *imasi-e-ni.*
    tale-ACC   tell-PAST-3SG
    'The mother told a tale so that we don't fall asleep.'

d. *Bue-ni*   *eme:-ni*   *e-lege-mi*   *etete.*
    he-3SG   come.PAST-3SG   [NEG-PURP-SS   work]
    'He came in order not to do any work.'

(1737) a. *Si*   *e-lisi:*   *ŋene* *bu*   *wakca-mi*
           [you   NEG-CC.2SG   go]   we   hunt-INF
           e-zeŋe-u   *ñoni.*
           NEG-FUT-1PL.EX   can
           'If you don't go, we won't be able to hunt.'

b. *Bi e-li*   *olokto-si*   *lali-muse-i.*
    [me NEG-CC.SS   cook-IM]   starve-COND-1SG
    'If I don't cook, I will be hungry.'

c. *Bi ule-we*   *e-lisi:*   *olokto bi*
    [me meat-ACC   NEG-CC.1SG   cook] me
    mafa-i   *min-e-we*   *ñaugdasi-zeŋe-ni.*
    husband-1SG   me-0-ACC   curse-FUT-3SG
    'If I don't cook meat, my husband will curse me.'

(1738) a. *Ule:-we*   *ei-mi*   *wa:*   *zug-tigi*
           [meat-ACC   NEG-INF   kill]   house-LAT
           e-zeŋe-u   *eme-gi.*
           NEG-FUT-1PL.IN   come-REP
           'Without finding meat, we won't return home.'

b. *Nua-ti*   *ei-mi*   *ča:la* *e-si-ti*   *oňo.*
    he-3SG   [NEG-INF   want]   NEG-PAST-3PL   write
    'They wouldn't have written (it) without wanting to.'

c. *Ei-mi-de*   *etete* *kino-tigi*   *ŋene:-ni.*
    [NEG-INF-FOC   work]   cinema-LAT   go.PAST-3SG
    'He went to the cinema without working.'

If the subordinate clause contains the existential copular construction, the impersonal negative copula *anči* precedes the verb *bi-* in the corresponding form, for example, the Perfective Converb in (1739), the Conditional Converb in (1740), or the Infinitive in (1741). For non-existential copular constructions

in the subordinate adverbial clause negation is formed with the Present stem of the negative verb *ei* and the corresponding form of the verb *bi-* (1742).

(1739) a. *Na:*   *xu-ni*   *anči*   *bi-si-ni*   *min-zuŋe*
       [earth   smell-3SG   no   be-PP-3SG]   we-both
       omo-si-gi-zeŋe-fi.
       one-V-REP-FUT-1PL.IN
       'If there is no earth smell, we two will unite again.'

     b. *Bi* *eke-le*   *anči*   *bi-si*
       [me time-PART   no   be-PAST]
       e-muse-i   *ŋene.*
       NEG-COND-1SG   go.
       'If I didn't have time, I wouldn't go.'

(1740) *Sugzä:* *anči*   *bi-lisi-ni*   *lali-kce-zeŋe-fi.*
       [fish   no   be-CC-3SG]   starve-INT-FUT-1PL.IN
       'If there is no fish, we will be hungry.'

(1741) *Su:* *anči*   *bi-mi*   *xai*   *ñamai.*
       [sun   no   be-INF]   still   warm
       'Although there is no sun, it is still warm.'

(1742) *Nua-ni* *ei*   *uni*   *bi-si*   *geje*   *ŋene-muse.*
       he-3SG NEG   be.ill   be-PAST   together   go-COND
       'If he were not ill, he would have come (with us).'

23.2.1.6.4. Generalized relative clause

Affirmative generalized relative clauses can be both finite (18.3.2.1) and non-finite (19.5.2), but in the negative form only the non-finite construction is allowed. Sentences with the generalized negative relative clause express the non-existence of the class of objects characterized by the relative clause. The superordinate clause of such sentences is a negative existential construction with the existential negative copula *anči*. The relative clause is headed by an indefinite non-specific pronoun (9.6.2) with the negative interpretation, or an expletive word such as *ba:* 'place, nature'. The relative clause predicate corresponds to the Destinative Participle (7.6.1.4). Like the regular relative clause (Chapter 19), the generalized negative relative clause can be prenominal or postnominal.

In prenominal clauses the Destinative Participle is not marked by a personal inflection. In most cases it immediately precedes the head (indefinite pronoun) as in (1743), but can be extraposed as well (1744). The Future passive participle can occasionally function as the predicate of such a relative clause

(1745). The prenominal negative generalized relative clause normally has an impersonal interpretation.

(1743) a. *Diga-kči   j'eu-de anči.*
            [eat-DP   what-IND]   no
            'There is nothing to eat.' (K 146)
         b. *ŋene-kči   ba:-ni   anči.*
            [go-DP   place-3SG]   no
            'There is no place to go.'

(1744) *O-du   j'e-we-de   anči   umi-kči.*
         this-DAT   [what-ACC-IND]   no   [drink-DP]
         'There is nothing to drink here.'

(1745) *Nua-ni   zugdi-du-ni   j'eu-de   anči   diga-u-zeŋe.*
         he-3SG   house-DAT-3SG   [what-IND]   no   [eat-PAS-FP]
         'There is nothing to eat in his house.'

The postnominal generalized relative clause usually includes the subject encoded by the Nominative noun phrase. However, the subject agreement is suppressed: the relative clause predicate (the Destinative Participle) always takes the 3rd person suffix *-ni* independently of the person and number of the subject, cf. (15.1.1.2.1).

(1746) a. *Bi nua-tigi-ni   j'e-we-de   dian-a-kči-ni*
            [me he-LAT-3SG   what-ACC-IND   talk-0-DP-3SG]
            anči.
            no
            'I don't have anything to talk about with him.'
         b. *Bu i:-le-de   bagdi-kči-ni   anči   bi-s'e.*
            [we what-LOC-IND   live-DP-3SG]   no   be-PERF
            'I don't have anything to live in.'
         c. *Minti   j'e-uxi-de   ŋene-kči-ni   anči.*
            [we   what-LAT-IND   go-DP-3SG]   no
            'We don't have anywhere to go.'

Note that the Nominative subject is located within the relative clause itself, as indicated by the bracketing. A piece of evidence for this comes from the position of adverbs: they can precede the relative clause subject but cannot follow it, as illustrated in (1747).

(1747) *O-du*   *bi (*o-du)*   *ni:-tigi-de*
      this-DAT   [me (*this-DAT)   man-LAT-IND
      dian-a-kči-ni   *anči.*
      say-0-DP-3SG]   no
      'Here I don't have anyone to talk to.'

In the Northern dialect, the impersonal Infinitive can be used in the generalized negative relative clause.

(1748) *J'e-we-de*   *tau-mu*   *anči.*
      what-ACC-IND   put-IMI   no
      'There is nothing to put (in the sack).' (SK 429)

23.2.1.7. Negative words

Udihe does not exhibit negative concord. No overt negative elements appear under the scope of sentence negation. Non-specific indefinite pronouns formed with the clitic particle *-dA* (9.6.2) function as negative pronouns.

Either the negative word itself (1749) or the noun phrase with the negative modifier (1750) must be strictly preverbal. In subjectless existential constructions the negative word is located before the predicative noun (1751).

(1749) a. *J'e-we-de*   *a-ta-i*   *b'a*   *si.*
          what-ACC-IND   NEG-SUBJ-2SG   get   you
          'You won't get anything.'
    b. *Belie*   *i:-le-de*   *e-si-ni*   *te:.*
          fairy   what-LOC-IND   NEG-PAST-3SG   sit
          'The fairy did not sit anywhere.' (K 34)
    c. *Zugdi-du*   *ni:-de*   *anči.*
          house-DAT   man-IND   no
          'There is nobody in the house.'

(1750) *J'eu-de*   *keje-we-ni*   *e-zi*
      what-IND   word-ACC-3SG   NEG-IMP.2SG
      dian-a.
      say-0
      'Don't say any words.' (K 174)

(1751) *J'e-le-de*   *okto*   *anči.*
      this-LOC-IND   medicine   no
      'There is no medicine anywhere.'

There can be several negative pronouns in a clause, all with a negative interpretation, cf.:

(1752) *Ni:-de*   *j'e-we-de*   *e-ini*   *sa:.*
        who-IND   what-ACC-IND   NEG-3SG   know
        'Nobody knows anything.'

23.2.2. Constituent negation

Constituent negation does not differ in a formal respect from sentence negation. When a constituent is negated but the contrasting alternative is not overtly expressed, the clause is interpreted as sentence negation. Constituent negation becomes apparent only in the situation of overt contrast, when the negated constituent is formally opposed to another semantically similar element (23.2.2.1). Only for some constituents is negation expressed by some specialized sentence constructions (23.2.2.2).

23.2.2.1. Contrastive constituent negation

When a contrastive focus constituent is negated, the contrasting element is also present in the sentence. It is in some way expressed in the conjoint clause with the affirmative interpretation. In the negative clause negation is expressed in a formally regular manner, while the verb in the conjoint clause takes the same morphological form. Examples (1753) present the negation of the nominal constituent, examples (1754) the negation of the predicative element of the copular construction, and example (1755) the negation of the finite verb.

(1753) a.   *Nua-ni*   *ei*   *zugdi-le*   *e-ini*   *bagdi*
            he-3SG   this   house-LOC   NEG-3SG   live
            xoŋto-lo   *bagdi:-ni.*
            another-LOC   live-3SG
            'He lives not in this house but in the other one.'
     b.   *Bi* *Stepana-zi*   *e-si-mi*   *wakca,*
            me Stepan-INST   NEG-PAST-1SG   hunt
            Iwana-zi   *wakca:-mi.*
            Ivan-INST   hunt.PAST-1SG
            'I hunted not with Stepan but with Ivan.'

c.   *Sele-me*   *emuge-we*   *bi*   *ei-mi*   *gele,*
       iron-ADJ   cradle-ACC   me   NEG-1SG   ask
       aisi-me-we   *gele-mi.*
       gold-ADJ-ACC   ask-1SG
       'I am not asking for an iron cradle, I am asking for a gold one.'
       (Schneider 1937: 86)

(1754) a.   *Bi*   *moxo-i*   *c'aligi*   *e-ini*   *bie*
           me   cup-1SG   white   NEG-3SG   be.PRES.HAB
           xulaligi   *bi:-ni.*
           red   be-3SG
           'My cup is not white but red.'

       b.   *Ei b'ata*   *e-ini*   *bie*   *aziga*
           this boy   NEG-3SG   be.PRES.HAB   girl
           bi:-ni.
           be-3SG
           'This is not a boy, but a girl.'

(1755) *Giusa-wa*   *e-si-mi*   *wa:*   *sieni-e-mi.*
       roe-ACC   NEG-PAST-1SG   kill   wound-PAST-1SG
       'I didn't kill the roe, but wounded it.'

The contrastive alternative may be rendered with the expression *ei bie* 'not', cf.:

(1756) a.   *Ei*   *Iwana*   *eme-gi-e-ni*   *Petra*
           this   Ivan   come-REP-PAST-3SG   Peter
           ei   *bie.*
           NEG   be.PRES.HAB
           'This is Ivan who has returned, not Peter.'

       b.   *Ise-je*   *j'eu*   *xokto-ni,*   *käŋa:-s*
           see-IMP.2SG   what   footstep-3SG   deer-DIS
           ogbö:-s.
           elk-DIS
           'See whose footsteps these are, a deer's or an elk's?'

(1757) *Käŋa*   *ei*   *bie,*   *ogbö*   *xokto-ni.*
       deer   NEG   be.PERS.HAB   elk   footstep-3SG
       'They are not the deer's, but the elk's (the footsteps).'

23.2.2.2. Non-contrastive constituent negation

Special constructions for non-contrastive constituent negation are used in certain cases, normally when the negated constituent expresses some kind of secondary predication. Such constructions are formed with the copula *anči* in certain case forms and the Partitive form of the possessed noun.

23.2.2.2.1. Negation of the circumstance adjunct

The construction with the negated circumstance adjunct (15.4.5.6) means 'without something'. It has two formal types. First, the adjunct can be negated with the negative copula in the Instrumental case (*anči-zi* <no-INST>), which follows the possessed noun in the Partitive form (1758). Personal pronouns do not have the Partitive form (1759). The circumstance adjunct is enclosed in brackets in examples below.

(1758) a. *Bi   čaja-wa   umi-mi   sata-la   anči-zi.*
           me   tea-ACC   drink-1SG   [sugar-PART   no-INST]
           'I drink tea without sugar.'

b. *Bi   zueze-we   tikpe-le   anči-zi*
    me   table-ACC   [nail-PART   no-INST]
    wo:-mi.
    make.PAST-1SG
    'I made a table without nails.'

c. *J'e-we   bui-we-ni   ku'ai-la   anči-zi*
    what-ACC   animal-ACC-3SG   [ear-PART   no-INST]
    b'akta-wan-a-i-ze.
    hear-CAUS-0-IMP.2SG-HORT
    'Let all animals listen (as if they were) without ears.'

d. *Mende-le   anči-zi   sigili-je.*
    [end-PART   no-INST]   stir-IMP.2SG
    'Stir without stopping.'

(1759) *Su   anči-zi   zuge   b'a-mu   bu.*
       [you   no-INST]   trouble get.PAST   we
       'We had trouble without you.'

Second, in the construction in question the copula *anči* can take the Ablative case and is inflected with the 3rd person personal affix *-ni*, so its resulting form is *anči-digi-ni* <no-ABL-3SG>. The possessed noun then appears in the Nominative case. There does not seem to be any semantic difference between these two options.

(1760) a.   *Ei*   *suese*   *anči-digi-ni*   *nua-ni*

[this   axe   no-ABL-3SG]   he-3SG

e-ini   *xuli.*

NEG-3SG   walk

'He does not walk without this axe.'

b.   *Ei*   *kusige* *anči-digi-ni*   *e-ini*   *etete.*

[this   knife   no-ABL-3SG]   NEG-3SG   work

'He does not work without this knife.'

23.2.2.2.2. Negation of the temporal adjunct

A temporal adjunct which is normally encoded by the Dative noun phrase (15.4.2.1) is negated with the Dative case of the negative copula inflected with the 3rd person personal affix (*anči-du-ni* <no-DAT-3SG>). Examples are:

(1761) a. *exe-ni*   *anči-du-ni*

elder.sister-3SG   no-DAT-3SG

'while her older sister is absent'

b. *Si*   *sita-na-i*   *anči-du-ni*   *zugdi-du*

[you   son-PL-2SG   no-DAT-3SG]   house-DAT

simu-simu *bie.*

quiet-quite be.PRES.HAB

'It is quiet in the house without your sons.'

c. *Nua-ni*   *gagda-i*   *anči-du-ni*   *bagdi-mi*

[he-3SG   friend-REF no-DAT-3SG]   live-INF

e-ini   *mute.*

NEG-3SG   can

'He can't live without his friend (in the absence of his friend).'

d. *bua*   *tue-ni*   *xokto* *anči-di-ni*   *ŋene-mi*

place   winter-3SG   road   no-DAT-3SG   go-INF

'walking in winter in the forest without a road' (SK 94)

The following example demonstrates that when the argument of the negative copula is a personal pronoun, the copula can take personal inflections other than that of the 3rd person.

(1762) *Bi* *anči-du-i*   *bagdi:.*

me no-DAT-1SG   live.2SG

'You live without me.' (SK 778)

    With respect to living persons similar meaning can be also rendered by means of the postposition *geun-di(le)-ni* 'in the absence of somebody' (see 10.2.1.3.2).

23.2.2.2.3. Negation of the Proprietive

The Proprietive is negated with the copula *anči* and the Partitive form of the possessed noun. This construction behaves like most regular modifiers, that is, it can be either prenominal or postnominal (on postnominal extraposed modifiers see 24.2.1.2.3). In the prenominal modifying construction the copula is in the Nominative (1763). Such a negative modifier in the Nominative case normally functions as a co-predicative element (1764).

(1763) *Bi   kusige-i   bu-o:-mi   ñukte-le   anči*
      me knife-1SG give-PAST-1SG   hair-PART   no
      ni:-du.
      man-DAT
      'I gave my knife to a bald person (a person without hair).'

(1764) a. *Nua-ni   zä:-ŋi-le   anči   eme:-ni.*
          he-3SG   money-AL-PART   no   come.PAST-3SG
          'He came without money.'
     b. *Bi   zugdi-le   anči   bagdi-mi.*
          me house-PART   no   live-1SG
          'I live without a house.'

Besides this, the negative possessive construction with the copula *anči* can be conjoint to the clause; such cases are addressed in 18.1.2.2.2.

Chapter 24
Information structure and word order

This chapter deals with the effects of information structuring on the surface shape of the clause. We assume that the information structure is an independent level of clause representation that deals with the "packaging" of the information in the utterance. The relevant units of the information structure here considered as primitives are topic and focus. In their definition we will rely heavily on the practice of Lambrecht (1994) where they are identified in relation to one another and to the corresponding proposition. Topic will be understood as the subject about which the proposition is pragmatically construed (Lambrecht 1994: 131). The existence of a topic participant is presupposed by the speaker, so topic is always (a part of) the pragmatic presupposition of the utterance. Focus will be understood as "the semantic component of a pragmatically structured proposition whereby the assertion differs from the presupposition" (Lambrecht 1994: 213). If the presupposition is lacking, the focus and the assertive part of the utterance coincide. Thus, every sentence has a focus, but not every sentence necessarily has a topic (if it lacks a pragmatic presupposition). Roughly speaking, sentence elements that do not correspond to the functions of topic and focus may be viewed as neutral with respect to information structure.

Although, strictly speaking, the notions "topic" and "focus" refer to relations at the level of information structure, we will use these terms to refer to the corresponding elements of the clause as well. Topic normally corresponds to a non-verbal constituent whose referent is mentioned in the discourse, although new topics are possible as well. As distinct from the topic, focus can correspond not only to the nominal constituent, but to a verbal constituent as well.

We will further assume that information structure functions stand in a certain mapping relationship to syntactic and semantic units. However, this is a matter of considerable controversy, and no attempt will be made to describe here such mapping relationships in Udihe. This chapter only concentrates on the correspondences between a particular information structure status and the linear order of the sentence elements. As demonstrated below, word order in Udihe is primarily motivated by information structure considerations, although grammatical information is also relevant.

Section 24.1 deals with word order at a clause level. Additional information about word order can also be found in other chapters, particularly those on

questions and negation (Chapter 23), on the adverbs (10.1.7), and the particles (Chapter 12). Word order within a regular NP is treated in Chapter 13.

In some cases the information structure, together with semantics, conditions the sentence construction, that is, the encoding of semantic units by grammatical relations. Some remarks on this may be found in Chapter 16 on the valence-changing operations. Such alternative constructions at the level of the clause were discussed in Chapter 16. In section 24.2 we address the word order and information structure driven alternative encoding of sentence elements within a noun phrase, while in 24.3 we focus on copular constructions.

24.1. Word order at a clause level

Udihe exhibits certain typological features of a head-final SOV language: a head-final noun phrase (Chapter 13) and relative clause (19.1), a left-branching complement embedded clause before the matrix verb (Chapter 20), postpositions (10.2), etc. Indeed, the SOV order is the most common statistically as well. The typical SOV order is illustrated by examples below.

(1765) a. *Mamasa   ule:-we   olokto-ini.*
          old.woman   meat-ACC   cook-3SG
          'The old woman is cooking meat.'

     b. *Omölo-i   wopti-we   kimpigi-e-ni.*
          granddaughter-1SG door-ACC   close-PAST-3SG
          'My granddaughter closed the door.'

     c. *Činda-ziga   jegdige   ag'a-du   kuge-we*
          bird-PL   hero   brother-DAT   bellows-ACC
          kuge:-ti.
          blow.PAST-3PL
          'The birds blew (the fire) with bellows for the brother hero.'
          (SKX 76)

Cross-linguistically, subject is known to correlate with topic information structure status, while the direct object is likely to encode the focus (in the sense of narrow focus). The SOV order in Udihe seems to be a result of three independent requirements: (i) the preverbal position of the focus (24.1.1), (ii) subject/topic initiality (24.1.2), and (iii) verb finality (24.1.3). Requirement (i) appears to be inviolable, therefore, when an element other than the direct object corresponds to the focus function, the SOV order is abandoned. Requirements (ii) and (iii) can easily be violated. As a result, the SOV order appears non-rigid, deviations being motivated by specific information structure requirements.

Elements that do not bear the focus or topic functions in the information structure seem to be located relatively freely in the sentence. Clausal adverbs tend to stand in the clause-initial position (10.1.7.1).

24.1.1. Focus position

The most important requirement of Udihe word order is the preverbal position of the focus element. In a clause that does not involve any constituents other than SOV, this, under normal discourse conditions, results in the preverbal position of the object. The reason for this is that in such sentences the object typically corresponds to the focus function, while the subject normally corresponds to the topic function. In clauses with a more complicated structure, the focus element is necessarily strictly preverbal independently of its semantic role. Other elements are located either before the focus element or after the verb. Different cases are exemplified below.

The focus element (especially the focus that bears an additional contrastive implication) is highlighted by a high pitch intonation. In the translations we will capitalize the element that corresponds to the focus function.

24.1.1.1. Question words

Question words are universally known to be pragmatically and formally associated with the focus. In Udihe, the position of the question word is necessarily strictly preverbal. On exceptions see 23.1.1.6. Examples of preverbal question words, clause-initial (1766) and non clause-initial (1767) are cited below.

(1766) a. *I:-le*   *b'a-i*   *si*   *mamasa-na-mi?*
           what-LOC   find.PAST-2SG   you   wife-DEST-REF
           'WHERE did you find a wife for yourself?' (K 146)

      b. *Ei ni:*   *bi:-ni*   *Susana*   *neŋu-ni?*
           this man   be-3SG   Susan   younger.sibling-3SG
           'Is THIS MAN Susan's younger brother?'

(1767) a. *Um'a*   *i:-du*   *xuaja:-i?*
           hook   what-DAT   break.PAST-2SG
           'WHY did you break the hook?' (K 111)

      b. *Sugzä:-wa*   *j'eu*   *diga-gi-e-ni?*
           fish-ACC   what   eat-REP-PAST-3SG
           'WHO ate the fish again?' (K 148)

24.1.1.2. Subject focus

When the subject bears a focus status, the possible word orders are OSV (1768a) or SVO (1768b). In (1768b)–(1768c) the focus bears an additional contrastive implication.

(1768) a.   *Ei   kusige-we   min-du   Iwana bu-ge.*
             this knife-ACC   me-give   Ivan   give-PERF
             'This knife was given to me by IVAN.'

       b.   *Komo,   si   zomi: bi   sugzä:-ŋi-we-i?*
             Komo   you   steal.2SG   me   fish-AL-ACC-1SG
             'Komo, is it YOU who steal my fish?' (K 148)

       c.   *Ei Iwana eme-gi-e-ni   Petra   ei*
             this Ivan   come-REP-PAST-3SG   Peter   NEG
             bie.
             be.PRES.HAB
             'This is IVAN who has come, not Peter.'

24.1.1.3. Adverbial elements in focus

Certain (predicate) adverbials are likely to correspond to the focus function and are therefore mostly found in the immediately preverbal position (cf. 10.1.7.1). Examples of the preverbal focus on the instrumental noun phrase (1769a), the temporal adverb (1769b), and on manner adverbs (1770) are cited below. As can be seen, the direct object is separated from the verb by the focus element (1770).

(1769) a.   *Jogoso   tene   asi   kaŋgäs'a   mo: uli-we*
             river   CONT very   narrow   tree   water-ACC
             xaña-ẓi dakpisi:-ni.
             shadow-INST close-3PL
             'The river is very narrow, the trees cover the water WITH SHADOWS.'

       b.   *Susana   timana   eme-zeŋe-ni?*
             Susan   tomorrow   come-FUT-3SG
             'Will Susan come TOMORROW?'

(1770) a.   *Ei tege-we   ge:-ẓi   wo:-ti.*
             this gown-ACC   bad-INST   make.PAST-3PL
             'They had sewn this gown BADLY.'

b. *Ei dogbo-ni   sin-e-we   ono-do*
    this night-3SG   you-0-ACC   how-FOC
    nixe-mi   zawa-za-mi.
    do-INF   catch-SUBJ-1SG
    'I will catch you this night ANYWAY.' (K 145)

When degree adverbials and quantifiers within a noun phrase bear the focus function, they are located immediately before the verb, while the head noun is postposed (see section 24.2.1.2 on discontinuous constituents).

24.1.2. Subject initiality

The subject is normally clause-initial, especially in the absence of any oblique constituents.

(1771) a. *Bi si   anda-i   bi-mi.*
           me you   friend-2SG   be-1SG
           'I am your friend.'
     b.   *Nua-ni   pensija-wa   taulagi-e-ni.*
           he-3SG   pension-ACC   get-PAST-3SG
           'He got a pension.'

Subject initiality can be violated in the following cases.

24.1.2.1. "Scene-setting" expressions

Clausal adverbs (sometimes referred to as "external topics" or "scene-setting" expressions) are normally situated clause-initially, and therefore precede the subject, cf. 10.1.7.1. They take scope over the whole clause and express spatial or temporal aspects of the situation described.

(1772) a. *Wei-du   c'aligi ja: bi:-ni.*
           garden-DAT   white   cow   be-3SG
           'In the garden there is a white cow.'
     b.   *Utem(i)-de pauza baŋcala:-ni.*
           then-FOC   roe   kick.PAST-3SG
           'Then the roe kicked (him).'
     c.   *Neŋi-ni   timana   suala   teti-gi:,*
           day-3SG   tomorrow   ski   dress-REP.PRP
           gulin'e.
           leave.PERF
           'The next day he put on his skis and left.'

24.1.2.2. Presentational construction

A new participant is usually introduced in the discourse as a subject within presentational constructions in which the correlation between the subject and the topic is violated. In Udihe the (indefinite) subject of presentational sentences is regularly postposed after the verb. It may be immediately postverbal, as in (1773), or separated from the verb by other lexical material, as in (1774).

(1773) a. *Tukä-ini   pauza   mo:kt'oi   do-lo-ni.*
      run-3SG   roe   bushes   inside-LOC-3SG
      'There is a roe running in the bushes.'

    b. *Eme-kte:-ti   tukca.*
      come-DIST.PAST-3PL   hare
      'There the hares came.'

    c. *Xegdi-le-ni   tiŋmele:-ni   omo   seutige.*
      bottom-LOC-3SG   fell.PAST-3SG one   nut
      'One nut fell down.' (K 137)

    d. *Kete   b'äsa-la-ni   bie   gula.*
      Kete   river-LOC-3SG   be.PRES.HAB   rock
      'There is a rock on the river Kete.' (SKX 308)

(1774) *Agda-si-mi   adga-si-mi   tiŋmele:-ni   uta-digi*
      oar-V-INF   oar-V-INF   fell.PAST-3SG   that-ABL
      kuliga.
      snake
      'He was mooring, mooring, (and) a snake fell from there.'

24.1.2.3. Predicate focus

The subject is postposed to the postverbal position when the focus extends over the verb alone. This covers the following cases: (i) an "urgent news" report (1775); (ii) when the verb is in potential contrast (1776) or questioned (yes-no questions as in (1777) and answers to them); or (iii) when the action itself is emphasized and presented with an effect of immediateness (1778).

(1775) a. *Buk-ki-ni   Uza.*
      die-PAST-3SG   Uza
      'Uza DIED.'(K 114)

    b. *ŋene-zeŋe-i   bi.*
      go-FUT-1SG   me
      'I am LEAVING.' (K 148)

c. *Ge*   *zeli-we*   *is'e*   *Pakula.*
   well   bulltrout-ACC see.PERF   Pakula
   'Well, Pakula saw a bulltrout (a sort of salmon).'

d. *Uta-digi*   *tene*   *kepte-mi*   *ise-si:-te*
   that-ABL   CONT   lie-INF   see-IM.PRP-FOC
   te:-gi-e-ni   *gune*   *belie-n(i)-de.*
   get.up-REP-PAST-3SG   EV   girl-3SG-FOC
   'While lying down he then saw that the girl GOT UP.' (K 145)

(1776) *Ono-do*   *ja:*   *sin-e-we*   *uisigi-zeŋe-i*   *bi.*
       how-IND   PROV   you-0-ACC   rescue-FUT-1SG   me
       'Whatever happens, I will RESCUE you.' (K 188)

(1777) *Diga-u* *su?*
       eat-2PL you
       'Did you EAT?'

(1778) a. *Jogoso-li*   *solo-ini*   *Pakula ugda-zi.*
          river-PROL   go.upstream-3SG   Pakula boat-INST
          'Pakula is MOVING UP the river in the boat.'

       b. *Ute bede* *xuli-mi*   *ji:n-e-m(i)*   *bi.*
          that like   go-INF   come-0-1SG   me
          'So I came WALKING.' (K 181)

24.1.3. Verb finality

Verb finality is violated by the subject postposed under certain conditions
(24.1.2). In addition, it can be violated as a result of object postposing. When
an element other than the direct object corresponds to the focus function, the
direct object in the transitive clauses is likely to be postposed and stand after
the verb (1779). However, it may also be located before the focus element, so
variants such as (1780a) and (1780b) are both acceptable, while the latter is
likely to express a greater degree of contrast.

(1779) *Nua-ti*   *tutulu* *gele-masi:-ti*   *kusige-we.*
       he-3PL   always   ask-REC-3PL   knife-ACC
       'They always ask for a knife from each other.'

(1780) a. *Bi*   *nua-ma-ni*   *ŋala-zi:*   *zawa-za-mi.*
          me   he-ACC-3SG   hand-INST.REF   take-SUBJ-1SG
          'I would take him by the hand.'

b. *ŋala-zi:*   *zawa-za-mi*   *bi*
    hand-INST.REF   take-SUBJ-1SG   me
    nua-ma-ni.
    he-ACC-3SG
    'I would take him by the hand.'

In the language of the younger generation the object may be postposed without any particular information structure motivation, under the influence of Russian. This is possible even when the object is a (non-contrastive) focus, cf. (1781a) and (1781b).

(1781) a. *Pakula*   *zeli-we*   *is'e.*
           Pakula   bulltrout -ACC   see.PERF
           'Pakula saw a bulltrout (a sort of salmon).'
       b. *Pakula*   *is'e*   *zeli-we.*
           Pakula   see.PERF   bulltrout-ACC
           'Pakula saw a bulltrout (a sort of salmon).'

Elements other than subject and direct object may occasionally follow the verb. They are normally all kinds of adjuncts (1782), as well as the modifiers of the focused verb (see 10.1.7.2).

(1782) a. *Nada*   *kotoi-ziga*   *bi-si-ti*   *eni   mule.*
           seven   bald-PL   be-PAST-3PL   mother with
           'There lived seven bald ones with their mother.'
       b. *Sita-ni*   *tukä-na:-ni*   *zugdi-tigi.*
           child-3SG   run-DIR.PAST-3SG   house-LAT
           'His son ran home.'

24.2. *Information structure within the noun phrase*

This section describes alternative organizations of the non-possessive (24.2.1) and possessive destinative (24.2.2) noun phrase that are conditioned by the different distribution of information structure functions between their components.

24.2.1. Non-possessive noun phrase

Here we focus on the alternative organization of the modified non-possessive noun phrase, mostly those in which the modifier corresponds to an adjective or a quantifier. As was argued in Chapter 13, the noun phrase is normally head-final. Attributive agreement in case is absent, while agreement in number

is optional (13.2.2). The relation between the head and the non-possessive modifier is not encoded by any special morphological device. However, under conditions driven mainly by considerations of information structure there may be variance in word order and the encoding of the attributive relationship within a noun phrase.

Generally speaking, the regular organization of the noun phrase described in Chapter 13 is observed when both the modifier and the head noun bear the same status in the information structure (topic, focus, or neutral). This results in the noun phrase being unpartitioned from the point of view of information structure. When their statuses differ, either the modifier is raised (24.2.1.1), or the noun phrase is organized discontinuously (24.2.1.2).

24.2.2.1. Modifier raising

Certain types of modifiers can be raised to the head position. Typically, the construction is motivated by some sort of modifier's foregrounding. It is observed when the head noun and the modifier bear different information structure functions, namely, either the head is topicalized (cf. the topicalizing internal relative clause (19.2)) or the modifier is in (contrastive) focus, or both of these conditions hold.

(1783) *ŋene-mi* *jegdige* *xokto* *agdan-di-ni*
   go-INF   hero   road middle-DAT-3SG
   ogbie-we *wa:-ni,* *ogbie* *bogo-wo-ni.*
   moose-ACC kill.PAST-3SG moose fat-ACC-3SG
   'The hero was walking and on half way he killed a moose, a FAT moose.' (SKX 186)

However, this condition does not seem to be very strong. Sometimes modifier raising is available in the same contexts where a non-raising adjective-noun construction is used. For example, in (1784a) a regular noun phrase (*saŋta mamaka* 'old woman') is coordinated with a moidifier-raising construction (*ni:nta saŋta-ni* 'old man'). The same is in (1784b).

(1784) a. *Saŋta* *mamaka* *ni:nta* *saŋta-ni* *uli*
     old   old.woman man old-3SG   water
     kä:-la-ni   *xeŋeful'e-si* *ut'asi* *Luŋie-tigi*
     edge-LOC-3SG kneel-PP.SS then Lungie
     xeŋki-si:-ti.
     bow-IM-3PL
     'An old woman or an old man kneel down near the water and bow to Lungie.' (SK 1043–1044)

b.   *Ninta*   *saŋta-ni*   *bi-mi*   *abuga*   *bi-ze-i,*
     man   old-3SG   be-INF   father   be-SUBJ-2SG
     saŋta   *a:nta-ni*   *bi-mi*   *eniŋe*   *bi-ze-i.*
     old   woman-3SG   be-INF   mother   be-SUBJ-2SG
     'If you are an old man, be my father, if you are an old woman, be
     my mother.' (SKX 224)

The raised modifier acquires the following head properties: (i) it is an
obligatory constituent of the clause; (ii) it bears morphological markers that
show the external syntactic relations of the noun phrase in the clause (case
markers); (iii) it is located in a typical head position, that is, phrase-finally; and
(iv) it is marked by the possessive affix in the same way as the head of the
possessive phrase (13.1), which suggests that the initial head nominal is
demoted to the position of possessor. The structure of the noun phrase with the
raised modifier is as follows:

(1785) noun – modifier + the case marker + the 3rd person personal affix *-ni*

The following modifiers undergo raising: adjectives (24.2.2.1.1), certain
quantifiers (24.2.2.1.2), and the relative clause. The internal relative clause (the
"topicalizing" relative clause) was discussed in 19.2. The information structure
requirement that conditions this type of relative clause is basically the one that
conditions the raising of other modifiers, namely, the topicalization of the head
noun. Most quantitative nouns with a partitive meaning (13.3.3.2), numerals,
possessive modifiers (13.1), modifiers expressed by a postpositional phrase
(13.5), or the oblique-case noun (13.6) do not undergo raising, although some
of them may be postnominal.

When the raised modifier construction is in its turn the head of the
possessive phrase, the possessive affix *-ni* is replaced by the possessive affix
that refers to the possessor of the possessive phrase. In (1786b) the raised
quantificational noun (*tie* 'pair') bears the 2nd person personal marker, cf. the
regular construction (1786a).

(1786) a.   *si tie kolo-wo-i*   'your pair of mittens' (ACC)
            <you pair mitten-ACC-2SG>
       b.   *si kolo tie-we-i*   'your pair of mittens' (ACC)
            <you mitten pair-ACC-2SG>

24.2.1.1.1. Adjectival modifier raising

In (1787) we exemplify postnominal adjectival modifiers that bear the 3rd
person personal marker *-ni* and a case affix indicating the syntactic role of the
noun phrase. In these examples, adjectival modifiers bear new information (are

in focus), and the head noun is part of a pragmatic presupposition, i.e. (a part of) the topic. In addition the raised adjectival modifier may express a high degree of the quality, as in (1788).

(1787) a.   *Bi   zugdi   ñamai-du-ni   bagdi-mi.*
          me   house   warm-DAT-3SG   live-1SG
          'I live in a warm house.'

      b.   *Ogbö   bui   kuaj'a-ni   bi:-ni.*
          elk   animal   swift-3SG   be-3SG
          'The elk is a swift animal.'

      c.   *Asasa,   banixe,   b'ata   ni: baja-ni.*
          thanks   thanks   boy   man   rich-3SG
          'Thank you, thank you, dear fellow.'

      d.   *Bi   čaja   xekui-zi-ni   daga:-mi.*
          me   tea   hot-INST-3SG   burn.PAST-1SG
          'I burnt myself with hot tea.'

      e.   *Jegdige   maNga-wa-ni   teluŋu-si-ze-mi.*
          hero   strong-ACC-3SG   story-V-SUBJ-1SG
          'Let me tell about a strong hero.'

      f.   *Tuduze   bombo-ni   olokto-i.*
          potato   round-3SG   cook-PRP
          'He cooks round potatoes.'

      g.   *Ule: ñaligi-we-ni   xekui   uli-le*
          meat   raw-ACC-3SG   hot   water-LOC
          ula-je.
          wet-IMP.2SG
          'Wet the raw meat with hot water.'

(1788) a.   *Bi   ali-de e-si: b'agdi-se   b'ata*
          me   when-IND NEG-PAST.1SG   meet-EXP   boy
          maŋga-wa-ni.
          strong-ACC-3SG
          'I have never met such a strong boy.'

      b.   *Bi   od'o-i   edi   maŋga-wa-ni*
          me   grandfather-1SG   wind   strong-ACC-3SG
          ise-si-e-ni.
          see-IM-PAST-3SG
          'My grandfather saw a very strong typhoon.'

      c.   *Bi   ali-de   e-si: ise   kuliga*
          me   never   NEG-PAST.1SG   see   snake
          sagdi-we-ni.
          big-ACC-3SG
          'I have never seen such a big snake.'

24.2.1.1.2. Quantifier raising

Scalar quantifiers *egdi* 'many, much', *wac'a* 'little, few', *xa:* 'some' are raised under the same conditions as adjectives, and form the same construction, cf.:

(1789) a. *Bu   ni: egdi-tigi-ni   ŋene-mu.*
         we   man   many-LAT-3GS   go-1PL.EX
         'We visit many people.'
     b. *Eineŋi   ni: egdi-ni.*
         today   man   many-3SG
         'There are many people today.'

The raising of the universal quantifier *teu* (11.2.2.1) is fairly frequent.

(1790) a. *Ni: teu-ni   zeu-we   diga-wa   ča:la.*
         man   all-3SG   food-ACC   eat-ACC   like
         'All people like eating.'
     b. *Bi   o-du   ni: teu-me-ni   sa:-mi.*
         me   this-DAT   man   all-ACC-3SG   know-1SG
         'I know all the people here.'
     c. *Ineŋi   teun-di-ni   eme-gi:-de*
         day   all-DAT-3SG   come-REP.PRP-FOC
         eme-gi:.
         come-REP.PRP
         'He comes and comes again every day.'
     d. *Ni: teun-tigi-ni   lauli-mi   gusi:-ni.*
         man   all-LAT-3SG   dance-INF   play-3SG
         'He is playing, dancing for all the people.'

Some quantitative nouns with a partitive meaning (13.3.3.1) can undergo raising as well.

(1791) *omo kolo tie-ni*   'one pair of mittens'
         <one mitten pair-3SG>

24.2.1.1.3. Lack of possessive marking

In particular cases the raised modifier is not marked for the 3rd person Singular, although otherwise the construction remains the same: the modifier is phrase-final and takes case markers indicating the role of the phrase in the external syntax. The lack of possessive marking is typically observed when the adjective modifies the indefinite pronoun (either the specific indefinite pronoun

j'eu-ke (9.6.1) or the non-specific indefinite pronoun *j'eu-de* (9.6.2)), although for neither is the possessive affix totally impossible, as shown in (1793).

(1792) a.   *Bi   ise-mi   j'eu-ke   xulaligi   bi:-ni.*
         me   see-1SG   what-IND   red   be-3SG
         'I can see: there is something red.'

      b.   *J'eu-ke   seuni-we   t'osi-e-ni   bize.*
         what-IND   scary-ACC   dream-PAST-3SG   must
         'He must have dreamt about something scary.'

      c.   *Gazi-je   min-du   j'eu-de*
         bring-IMP.2SG   me-DAT   what-IND
         uligdig'a-we-de.
         beautiful-ACC-FOC
         'Bring me something beautiful.'

(1793) a.   *Bu-je   min-du   j'eu-de*
         give-IMP.2SG   me-DAT   what-IND
         xekui-we-ni.
         strong-ACC-3SG
         'Give me something strong.'

      b.   *Bi   ise:-mi   j'eu-ke   c'aligi-we-ni.*
         me   see.PAST-1SG   what-IND   white-ACC-3SG
         'I saw something white.'

The content components of the compound adjectives (6.4.4) when raised within the noun phrase are never marked with the 3rd person possessive marker (1794). This also applies to some other adjectives (1795).

(1794) a.   *Geŋgem   xulu   mo:-ni   toŋdom*
         slim   ash.tree   tree-3S   straight
         bede   bie.
         like   be.PRES.HAB
         'She is slim like a straight ash-tree.' (SKX 188)

      b.   *Guas'a-ni   toči-ñeñeñe-de   xukti-e-ni.*
         bitch-3SG   thin-ADJ-FOC   run-PAST-3SG
         'His very thin bitch came running.' (SKX 260)

(1795) a.   *Bi   si   in'ei   bubu-we   ise:-mi.*
         me   you   dog   alike-ACC   see.PAST-1SG
         'I saw a dog like yours.'

      b.   *Bi   soŋo   seuni:-ŋku-we   ise:-mi.*
         me   bear   frightful-PL-ACC   see.PAST-1SG
         'I saw frightful bears.'

   c. *Bi   ise:-mi*   *zueze   xegie-ni*
       me see-1SG   house   place.below-3SG
       keŋku-we.
       empty-ACC
       'I saw the empty place under the table.'

   d. *E:xi-we   ja: ñoligi-zi   o:-iti.*
       frog-ACC   eye   green-INST   make-3PL
       'They make a frog with green eyes.' (SK 397)

   e. *Omos'o   iŋamukta-i   boktoli tugbo:-ni.*
       one   tear-REF   round drop.PAST-3SG
       'He dropped one round tear.' (SKX 218)

Finally, the quantifiers *teu* 'all' and *egdi* 'a lot, many, much' may raise without being marked for the 3rd person Possessive.

(1796) a. *Ni: teu   min-e-we   sa-du.*
       man   all   me-0-ACC   know-PL
       'Every man knows me.'

   b. *Uti   sewexi teu   omo   ba:-la*
       that idol all   one   place-LOC
       omo-si-e-k,   to:-lo   jaktuna:-ni.
       one-V-PAST-EXPR   fire-LOC   kindle.PAST-3SG
       'He gathered together all the idols in one place and lit the fire.'

   c. *Sita-na-i   teu   aja   bi:-ti.*
       child-PL-1SG   all   good be-3PL
       'All of my children are healthy.'

   d. *Bi ñ'aula egdi-du   bu-o:-ni   konfeta-wa.*
       me child many-DAT   give-PAST-3SG   candy-ACC
       'I gave candy to many children.'

24.2.1.1.4. Number agreement in the phrase with a raised modifier

The rules of number agreement within the phrase with the raised modifier do not seem to differ from those that operate in the regular noun phrase (Chapter 13). The controller of agreement is the noun. Although plurality does not have to be morphologically marked on the noun itself, a semantically Plural noun triggers a Plural affix on the adjective, see the following example and also (1795b).

(1797) *Min-du   mo: imexi-ŋku-we   uŋkäla:-ti.*
       me-DAT   tree   new-PL-ACC   carry.PAST-3PL
       'They brought me new wood.'

When the noun is formally in the Plural, number agreement is obligatory (cf. 13.2.2).

24.2.1.2. Discontinuous constituents

Discontinuous noun phrases appear in two cases: (i) when the modifier is in focus and located strictly preverbal, while the head noun is postposed; (ii) when the modifier stands at the end of the sentence, after the finite verb.

24.2.1.2.1. Adjectival modifier in focus

According to the general principle of Udihe word order (24.1), the focused constituent occupies an immediately preverbal position. Modifiers, when they bear a strong (contrastive) focus, may be located preverbally, while the head noun marked for case is postposed. Such a construction is mostly typical of different kinds of quantifiers and will be referred to as "quantifier float" (24.2.2.2.2), however, adjectival modifiers are also attested in focus position. Examples (1798b) illustrates a discontinuous adverbial clause.

(1798) a, *Seuni:*   *seuni: xulis'e*   *guŋ-ki-ni*
       wful   awful   come.PERF   say-PAST-3SG
       Zaŋdalafu   *tene-le.*
       Zaŋdalafu   CONT-FOC
       'She said: the AWFUL Zaŋdalafu came.' (K 105)
     b.   *Caixi*   *e-zi*   *xuli*   *auŋa-digi.*
       far   NEG-IMP.2SG   go   night.shelter-ABL
       'Don't go FAR AWAY from the night shelter.' (SK 252)

24.2.1.2.2. Quantifier float

The floated quantifier always has a morphologically bare Nominative form, as distinct from the constructions where the postposed quantifier agrees in case with the head nominal (13.3.6). The floated quantifier, therefore, behaves morphologically as an unchangeable adverb rather than an adjective or other determiner.

     The quantifiers that undergo floating are: the universal quantifiers *teu* and *käu* (in the Northern dialect) 'all', the scalar quantifiers *lä(si), egdi,* and *tä(si)* 'many, much, a lot', and – less frequently – some quantitative nouns with partitive meaning (13.3.3). Floated quantifiers do not inflect for case.

     The floated quantifier is located in the immediately preverbal position and bears the focus function. Quantifier float is normally triggered by the subject, as shown in (1799) or the direct object, as in (1800). It seems that grammatical

relations other than the subject and the direct object cannot trigger quantifier float. Typically the head noun immediately precedes the quantifier, but this is not necessary so. It may be postposed after the verb (1801).

(1799) a. *Mo:*   *abdä:-ni*   *teu*   *guline-kte:-ti.*
        three   leaf-3SG   all   leave-DIST.PAST-3PL
        'ALL the leaves of the tree fell down.'

     b. *Si min-du*   *teu*   *gida-si-u-ze-i.*
        you me-DAT   all   spear-V-PAS-SUBJ-2SG
        'You will ALL be killed with a spear by me.' (K 158)

     c. *Zuha*   *dul'aŋki-ni*   *kaunta*   *egdi*   *bagdi:.*
        summer   middle-3SG   butterfly   much   live.PRP
        'There are A LOT of butterflies in the middle of summer.'
        (SK 1096)

(1800) a. *Xunxuze*   *ni:-we*   *läsi*   *magi-e-ti.*
        robber   man-ACC   many   kill-PAST-3PL
        'Robbers killed MANY people.'

     b. *Xaisi*   *nada namu-wa*   *teu*   *dew-o:-ni.*
        again   seven sea-ACC   all   cross-PAST-3SG
        'He crossed ALL seven seas again.' (K 181)

     c. *Mafa*   *gegbeŋku-we*   *teu*   *aptasi-e-ni.*
        bear   berry-ACC   all   squash-PAST-3SG
        'The bear squashed all the berries.' (SK 924)

(1801) a. *Bi sin-digi*   *läsi*   *wa-zaŋa-i*   *činda-wa.*
        me you-ABL   many   kill-FUT-1SG   bird-ACC
        'I will kill MORE birds than you.'

     b. *Läsi*   *olokto:-ti*   *zeu-we.*
        much   cook.PAST-3PL   food-ACC
        'They cooked LOTS OF food.'

     c. *Ma:ma-la*   *tä:*   *wa:-ni*
        grandmother-CONT   much   kill.PAST-3SG
        sugzä:-wa-la   *um'a-ẓi-la.*
        fish-ACC-CONT   hook-INST-CONT
        'Grandmother killed LOTS OF fish with the hook.' (K 109)

     d. *Ima:*   *teu*   *dei-zeŋe-ni*   *xokto-wo.*
        snow   all   cover-FUT-3SG   road-ACC
        'Snow will cover ALL the roads.'

     e. *Bi moxo tapči gada:-mi*   *gegbeŋku-we.*
        me mug full collect.PAST-1SG   berry-ACC
        'We collected a WHOLE bowl of berries.'

f. *egdi*   *lagbaŋ-ki*   *bi-mi siekte ...*
   much   stick-PP   be-INF thread
   'if there were a lot of thread that had stuck ....' (SK 1096)

24.2.1.2.3. Extraposed modifier

The modifier that is located discontinuously from its head at the right edge of the clause is usually separated from the rest of the sentence by a pause, and bears a rising intonation. Formally constructions with the extraposed modifier are completely identical to the constructions with the non-adjacent relative clause (19.3). The extraposed modifier normally takes the case marker that indicates the syntactic role of the head nominal, but does not take a possessive suffix. Cf. construction (1802a) with modifier raising and (1802b), where the modifier is extraposed:

(1802) a. *Bu-je*   *min-du*   *j'eu-de*
        give-IMP.2SG   me-DAT   what-IND
        xekui-we-ni.
        hot-ACC-3SG
        'Give me something hot.'
     b. *Min-du*   *j'e-we-de*   *bu-je*
        me-DAT   what-ACC-IND   give-IMP.2SG
        xekui-we-de.
        hot-ACC-FOC
        'Give me something hot.'

Since the head nominal within the clause is marked for case, its syntactic role is indicated twice in the sentence. We only have examples of the Accusative and Nominative noun phrases with postposed modifiers at our disposal. The head noun controls the Plural marking on the postposed modifier, as in (1804b) below. It is not entirely clear, however, whether we are here dealing with an instance of attributive agreement, or whether the modifier is clause-external and should be analyzed as substantivized.

There seem to be two forms of modifier postposing. The first is motivated by information structure considerations, namely, the afterthought status of the postposed element. By "afterthought" we mean an element added after the completion of the sentence to clarify an element of the clause, such as, for example, *sagdi bäsa-la* 'a large river' in (1803a) or *uti ninta-wa* 'that man' in (1803b).

(1803) a. *Omo*   *bäsa*   *i:ŋ-ki-ti,*   *sagdi*   *bäsa-la.*
        one   river   come-PAST-3PL   large   river-CONT
        'They reached one river, a large river.' (K 153)

b. *Uti mo:-ŋi-ni   bue-we-ni   a:kta-mi*
that tree-AL-3SG   he-ACC-3SG   chase-INF
tukte-li-e-ni,   uti   ninta-wa.
beat-INC-PAST-3SG   that   man-ACC
'The wooden sticks began to chase him, they began to beat this
man.'

The most common situation, however, is when the modifier alone is postposed
as an afterthought element. Typically it "doubles" the case marking of the head
nominal, as in (1804), however, it may also appear unmarked for case, as in
(1805). In the latter case we may in fact be dealing with a coordinated
construction (see 18.1.2.2).

(1804) a. *Xoŋto   mamasa-wa   gada-laga-ni   nixe-ini*
other   wife-ACC   take-PURP-3SG   do-3SG
paki-we   uligdig'a-wa.
skilful-ACC   beautiful-ACC
'He is going to take another wife, a skilful one, a beautiful one.'

b. *Bi zu-be   soŋo-wo   b'agdi-s'e-i*
me two-ACC   bear-ACC   meat-EXP.PERF-1SG
seuni:-ŋku-we.
scary-PL-ACC
'I met two bears, scary ones.'

c. *Ni   aziga-ŋi-ni   eme:-ni*
who   girl-AL-3SG   come.PAST-3SG
alagdig'a-i-de?
beautiful-FOC-FOC
'Whose girl has come, so beautiful?'

d. *Mo:-wo   gada-ja   egdi-we-de*
wood-ACC   bring-IMP.2SG   much-ACC-FOC
aka-i   siesi-lege-i.
back-1SG   warm-PURP-1SG
'Bring wood, a lot (of it), so that I warm up my back.' (K 171)

e. *Min-du   j'e-we-de   bu-je*
me-DAT   what-ACC-IND   give-IMP.2SG
emei-we-de.
sharp-ACC-FOC
'Give me something that is sharp.'

(1805) a. *Bi ni:-we   ise:-mi   jagdugu-xi.*
me man-ACC   see.PAST-1SG   spectacles-ADJ
'I saw a man, in spectacles.'

b. *Ni*   *wo:-ni*   *tege-ne-i*   *ketu*
who   make.PAST-3SG   gown-DEST-2SG   very
uligdig'a?
beautiful
'Who made you a dress, a very beautiful one?' (K 163)

The second case of the modifier extraposing is conditioned by formal considerations (the "heavy" modifier). "Heavy" modifiers are those that take an argument: two-place adjectives (6.3.2), postpositional phrases (10.2.3), and the negative modifier (18.1.2.2.2). Although they are not excluded from a head-adjacent position (see the examples in the corresponding sections), a strong tendency is observed for them to be located discontinuously. In (1806) we illustrate adjectives that take an oblique argument, and in (1807) postpositional phrases. In the latter case, the discontinuous modifier is normally unmarked for case. However, in (1808) the postposition takes a case marker.

(1806) a. *Bi* *ni:-we*   *ise:-mi*   *ami-mi*
          me man-ACC   see.PAST-1SG   father-REF
          bubui-we.
          like-ACC
          'I saw a man looking like my father.'

b. *Bi* *in'ei-we*   *ise:-mi*   *si*
          me dog-ACC   see.PAST-1SG   you
          in'ei-digi-de   *maŋga-wa.*
          dog-ABL-FOC   strong-ACC
          'I saw a dog stronger than yours.'

(1807) a. *Bi* *ise:-mi*   *ñ'aula-wa*   *Iwana bubu.*
          me see.PAST-1SG   child-ACC   Ivan   like
          'I saw a child looking like Ivan.'

b. *Bi* *abuga-i*   *ise:-mi*   *Iwana* *zuŋe.*
          me father-1SG   see.PAST-1SG Ivan   both
          'I saw my father with Ivan.'

(1808) *Galakta-mi*   *wa-li-la-mi*   *maŋa ni:-we,*
      seek-1SG   kill-INC-PURP-SS   strong man-ACC
      men-e *kui:*   *bede-we.*
      REF-0   strength.REF like-ACC
      'I am looking for a strong man to fight with, (a man) equally strong to me.' (SK 881)

24.2.1.3. Summary of the structure of the noun phrase

The table below presents different patterns of the structure of the non-possessive noun phrase with a possible information structure motivation. Patterns (1809c) and (1809d) are instances of the discontinuous noun phrase, which is shown with the symbol V (verb) intervening between its components.

			possible information structure motivation
(1809)	a.	[modifier N + case]	informationally unstructured noun phrase
	b.	[N modifier + case + *ni*]	topicalized noun
	c.	[modifier] V [N + case]	modifier in focus
	d.	[N + case] V [modifier (+ case)]	afterthought modifier

24.2.2. Information structure in destinative constructions

In the regular possessive destinative noun phrases in the object role the head noun (the destinative object) encodes the person and number of the possessive modifier (the benefactive) by means of personal agreement affixes, see 13.1.

24.2.2.1. Topicalized object

The topicalized destinative object is encoded twice in the sentence: first within the regular destinative noun phrase, second, as the Accusative direct object promoted to sentence-initial position. Cf. (1810a), which illustrates the regular destinative construction, and (1810b) where the topicalized object is encoded with the Accusative noun phrase *ei suese-we* 'this axe'.

(1810) a. *Men-e*   *neŋu-i*   *suese-ne-ni*
        REF-0   younger.sibling-REF   axe-DEST-3SG
        wo:-mi.
        make.PAST-3SG
        'I made an axe for my younger brother.'

      b. *Ei*   *suese-we*   *men-e*   *neŋu-i*
        this   axe-ACC   REF-0   younger.sibling-REF
        suese-ne-ni   *wo:-mi.*
        axe-DEST-3SG   make.PAST-1SG
        'This axe, I made it for my brother.'

The topicalized left-dislocated Accusative noun phrase is normally separated by a pause from the rest of the sentence, and should perhaps be analyzed as clause-external, cf. also the following example:

(1811) *Ei   zugdi-we*   *bi*   *anda-i*   *zugdi-ne-ni*
      this house-ACC   me   friend-1SG   house-DEST-3SG
      wo-iti.
      make-3PL
      'This house, they are building it for my friend.'

24.2.2.2. Modifier in focus

If the destinative object takes a modifier other than the destinative modifier (for example, an adjective) it may be focused. As was argued in 24.1.1, the major requirement of Udihe word order is the preverbal position of the focus element, with the result that certain focus modifiers must be placed in the preverbal position. This results in the discontinuous noun phrase (24.2.1.2). For destinative constructions another strategy applies: the focus modifier within the destinative noun phrase does not occupy the strictly preverbal position, but modifies the Accusative object located in the preverbal position. The object, therefore, is syntactically "doubled" as the Accusative object located in the preverbal position and as the Destinative object (normally clause-initial). The latter corresponds to the presuppositional (topical) part of the utterance.

(1812) a. *Bi   men-e*   *suese-ne-mi*   *aja*   *suese-we*
          me REF-0   axe-DEST-REF   nice   axe-ACC
          ga:zi-e-mi.
          bring-PAST-1SG
          'As for an axe for myself, I brought a nice one.'
     b. *Seudi-ne-i*   *ñamai seudi-we*   *gada-ja.*
          kerchief-DEST-1SG   warm kerchief-ACC buy-IMP.2SG
          'As for the kerchief for me, buy a warm one.'
     c. *Bi   men-e ami-mi*   *tege-ne-ni*
          me REF-0 father-REF   gown-DEST-3SG
          seule-me   *sexi-we*   *gazi-e-mi.*
          silk-ADJ   cloth-ACC   bring-PAST-1SG
          'As for the clothes for my father, I brought a silk cloth.'
     d. *Pakula*   *ugda-na-mi*   *imexi-we*
          Pakula   boat-DEST-REF   new-ACC
          wo:-ni.
          make.PAST-3SG
          'As for the boat for Pakula, he made a new one for himself.'

   e. *Ulikte*   *dili-ne-ni*   *kuliga* *dili-ni*
      lard   head-DEST-3SG   snake   head-3SG
      duo-ni   *wo-iti.*
      shape-3SG   make-3PL
      'As for the lard's head, they make (it in the) shape of a snake's head.'

24.2.2.3. Topicalized benefactive

The topicalized benefactive (the destinative modifier) is raised out of the modifier position within the destinative noun phrase and encoded by the independent Dative noun phrase. Obviously, it cannot be omitted from the sentence like a regular (non-topicalized) destinative modifier. The possessive modifier within the destinative noun phrase itself is absent but anaphorically referred to by means of the possessive affixes. Cf. (1813a) and (1813b).

(1813) a. *Bi*   *au-na-ni*   *gada:-mi.*
       me   cap-DEST-3SG   buy.PAST-1SG
       'I bought him a cap.'
    b. *Bi*   *nuan-di-ni*   *au-na-ni*   *gada:-mi.*
       me   he-DAT-3SG   cap-DEST-3SG   buy.PAST-1SG
       'For him, I bought a cap.'

More example examples are:

(1814) a. *Men-e*   *neŋu-du-i*   *suese-ne-ni*
       REF-0   younger.sibling-DAT-REF   axe-DEST-3SG
       wo:-mi.
       make.PAST-1SG
       'For my younger brother, I made this axe.'
    b. *Ami-ni*   *b'ata-ma*   *sita-du-i*
       father-3SG   boy-ADJ   child-DAT-REF
       ada-na-ni   *o:-ini.*
       arrow-DEST-3SG   make-3SG
       'The father is making an arrow for his son.'

24.2.2.4. Summary on information structure within the destinative noun phrase

Below we present the patterns of organization of the possessive destinative constructions with possible information structure motivations. Symbol B here refers to the noun phrase that corresponds to benefactive (the potential recipient of the destinative object), O denotes the object noun).

(1815)   possible information structure
                                                        motivation

   a.   [B O + DEST + possessive]   informationally
                                                        unstructured noun phrase
   b.   [O + ACC] [B O + DEST + possessive]   topicalized object

   c.   [B O + DEST + possessive] [modifier O + ACC]
                                                        modifier in focus
   d.   [B + DAT] [O + DEST + possessive]   topicalized recipient

24.3. Information structure in copular constructions

On the regular structures of copular constructions see Chapter 17.

24.3.1. Intensifying the adjective

In adjectival copular constructions (17.2.2.1.1), the predicative adjective may take the 3rd person personal marker *-ni*. This situation expresses a certain semantic and perhaps information structure content, namely, the high degree of the feature denoted by the adjective, cf. the attributive adjectives that use the same device for the same purpose (24.2.1.1.1). Sentence (1816d) is an example of the Resultative Participle in the predicative position. The affix *-ni* here intensifies the meaning of the adjective.

(1816) a. *Bi sita-i   ketu   pag'a-ni.*
           me   son-1SG   very   stupid-3SG
           'My son is very stupid.'
    b. *Käŋa   kuaja-ni.*
           deer   fast-3SG
           'The deer is very fast.'
    c. *Zua xekui-ni.*
           summer hot-3SG
           'The summer is very hot.'
    d. *Tege   guzaga-na-ktu-ni.*
           gown   tear-DIST-RES-3SG
           'The gowns are all torn up.'
    e. *Ei zä: sagdi-ni.*
           this coin   large-3SG
           'This coin is (very) large.'

f. *Kuliga   egdi-ni.*
snake   much-3SG
'There are a lot of snakes.' (SK 1097)

24.3.2. Topicalized subject

The topicalized subject of copular constructions may be repeated twice within
the sentence: first, in the clause-initial position as the subject, second, as the
predicative element. The predicative word of the initial copular construction is
demoted to the modifier position. For example, the construction (1817b) with
the topicalized subject *Oloŋo wo:-ni* 'Olon mountain' is syntactically derived
from the regular copular construction (1817a). The predicative part *gugda wo:*
'high mountain' in (1817b) consists of the modifier *gugda* 'high' which
corresponds to the initial predicate and the "doubled" subject *wo:* 'mountain'.

(1817) a. *Oloŋo   wo:-ni   gugda.*
Olon   mountain-3SG high
'Olon mountain is high.'
     b. *Oloŋo   wo:-ni   gugda wo:.*
Olon   mountain-3SG high   mountain
'As for Olon mountain, it is high.'

(1818) *Uti   ni: aja   ni:.*   .
that   man   nice   man
'That man is nice.' (SK 82)

A range of copular constructions behave in this way: adjectival and
nominative constructions (24.3.2.1), destinative constructions (24.3.2.23), and
alienable possessive constructions (24.3.2.2).

24.3.2.1. Adjectival and Nominative constructions

Examples of adjectival and nominative copular constructions with the
topicalized subject are presented in (1819) and (1820) respectively.

(1819) a. *Bi zugdi: `   mo:-mo   zugdi.*
me house.1SG   tree-ADJ   house
'As for my house, it is made of wood.'
     b. *Ei bäsa aja   bäsa.*
this river nice   river
'As for this river, it is nice.' (K 154)

c. *Ei*   *'ana*   *imexi*   *'ana.*
    this boat   new   boat
    'As for this boat, it is new.'

(1820) a.   *Ei*   *mo:*   *kuŋka*   *mo:-ni*   *bi:-ni.*
           this tree   cedar   tree-3SG   be-3SG
           'As for this tree, it is a cedar.'

b.   *Ei*   *ñ'aula*   *udie*   *ñ'aula-ni*   *bi:-ni.*
      this child   Udihe   child-3SG   be-3SG
      'As for this boy, he is Udihe.'

24.3.2.2. Alienable possession constructions

In alienable possession copular constructions the predicative word corresponds to the noun with the alienable possession suffix *-ŋi-* (17.2.2.3). Such a noun does not function attributively. Therefore in constructions with the topicalized subject, the possessive modifier within the predicative noun phrase is expressed by the regular Nominative noun, cf.:

(1821) *Ei*   *zugdi*   *bi*   *anda-na-i*   *zugdi-ti.*
       this house   me   friend-PL-1SG   house-3PL
       'As for this house, it is my friends' house.'

24.3.2.3. Destinative constructions

In the destinative copular constructions (17.2.2.2.1) the possessive destinative noun phrase in the predicative function expresses the designation of the subject participant ('as my daughter', 'as our servant', etc.). In constructions with the topicalized subject, the predicate corresponds to the destinative phrase, where the head (the noun in the Destinative case) lexically repeats the subject.

(1822) *Ei*   *au*   *bi*   *abuga-i*   *au-ne-ni.*
       this cap   me   father-1SG   cap-DEST-3SG
       'As for this cap, it is for my father.'

24.4. *Topicalization of other constituents*

24.4.1. Extra-clausal topic

Generally speaking, an extra-clausal topic promoted to the beginning of the sentence is not typical of Udihe, however, such a construction is available in rare cases. Sentences (1823) are examples of colloquial speech where the

topicalized constituents corresponding to the possessor are extracted from the clause. The topicalized elements are separated by pauses from the rest of the sentence. The possessed noun phrase bears the possessive marking which anaphorically refers to the topicalized possessor.

(1823) a.   *Tukti-kče-i*   *getu*   *nuati* *gä:ma-ti*   *gula*
           climb-INT-PRP   PL   they   bone-3PL   rock
           xegien-du-ni   *bie.*
           bottom-DAT-3SG   be.PRES.HAB
           'As for those who wanted to climb, their bones are at the bottom of the rock.' (SKX 98)

      b.   *Biatu-ziga* *kawa* *do-nigi-ni*   *keje-ti*
           Biatu-PL   tent   inside-ABL-3SG   voice-3PL
           dio-pto:-ni.
           hear-DEC.PAST-3SG
           'As for Biatu, their voices were heard from inside the tent.' (SKX 88)

      c.   *Ni:* *bo:kto-zi*   *su:le-i*   *getu*   *nua-ni*
           man kidney-INST   be.sick-PRP   PL   he-3SG
           degdi-ni   *xuŋnaľ-xuŋnaľ*   *bie.*
           face-3SG   pale-pale   be.PRES.HAB
           'Those people who have kidney disease, their faces are very pale.' (SK 1017)

More regularly the possessive modifier can be topic-promoted out of the possessive copular construction, in which case the possessive marking on the predicative noun is missing and he construction can perhaps be reinterpreted as an existential construction (17.2.1.3).

(1824) a.   *Nua-ni*   *ila*   *ke:*   *in'ei*   *bie.*
           he-3SG   three   vicious dog   be.PRES.HAB
           'As for him, he has three vicious dogs.'
           (literally: 'As for him, there are three vicious dogs.')

      b.   *Bi* *mamasa-i*   *uligdig'a-i*   *ñukte*
           me   wife-1SG   beautiful-FOC   hair
           bi-s'e.
           be-PAST.HAB
           'As for my wife, she had beautiful hair.'
           (literally: 'As for my wife, there was beautiful hair.')

Subject topicalization may be expressed by means of the Infinitive of the verb *bi-* 'be' *bi-mi* (which is also used as a lexicalized time adverb, typically at the beginning of the sentence, see 10.1.2.2). This is mostly typical of the Northern dialect.

(1825) a.   *Mo:*   *bi-mi*   *o:kto*   *bi-mi*   *tu:*   *lu:*
               tree   be-INF   grass   be-INF   all   bright
               zegde-ini.
               burn-3SG
               'The trees, the grass, they are all burning very brightly.' (SKX 92)

      b.   *Tege-ni*   *bimi*   *buľ-buľ*   *oño-mo.*
               gown-3SG   be-INF   equal-equal   ornament-ADJ
               'His gown, it is (covered) with equal ornaments.' (SK 191)

      c.   *Tukca:-si*   *ima:-si*   *bi-mi,*   *tukca*   *bi-mi* –
               hare-DIS   snow-DIS   be-INF   hare   be-INF
               caligi,   *ima:*   *bi-mi* –   *xuŋuligi*
               white   snow   be-INF   grey
               'Either this is a hare or snow; for a hare it is (too) white, for snow, it is (too) grey.' (SK 368)

24.4.2. Topicalization by means of the Infinitive

The Infinitive in the beginning of the sentence may serve to topicalize the concept denoted by this verb. It is either the same verb as the main verb (1826) of differs from it (1827).

(1826) a.   *Uta bede*   *gusi-mi*   *egdi*   *ni:*   *gusi:-ti.*
               that like   play-INF   many   man   play-3PL
               'As for this game, a lot of people play.' (SKX 304)

      b.   *Oño-wo*   *o:-mi-de*   *onobui onobui*
               ornament-ACC   make-INF-FOC   which   which
               oño-wo   *o:-i.*
               ornament-ACC   make-PRP
               'As for making ornaments, they make all sort of them.' (SK 732)

      c.   *Wa:-mi-ke*   *e-zi*   *wa:.*
               kill-INF-FOC   NEG-IMP.2SG   kill
               'As for killing, don't kill (anybody).' (Schneider 1937: 82)

      d.   *Bu:-m(i)-de*   *bu-te-m(i)-ze.*
               give-INF-FOC   give-PERM-1SG-HORT
               'As for giving (it), OK, I will give (it).' (Schneider 1937: 86)

(1827) *Gusi-mi*   *mafa-g'asi:-ti,*   *nakta-g'asi:-ti.*
       play-INF   bear-V-3PL   boar-V-3PL
       'As for playing, they play bear (hunting) and boar (hunting).'

Chapter 25
Texts

In this chapter we provide samples of the orthography that has been used to render the Udihe materials, namely, the Latin-based orthography of Schneider (text no. 1), the partly phonetic transcription based on Cyrillic which Kormušin (no. 2) and Sunik (no. 3) have adopted, the official Udihe orthography established by Simonov for the Northern dialect, on which see section 1.6.3 (text no. 4), and the Cyrillic orthography of Perexval'skaja (no. 5). Unless indicated otherwise, for these texts we have wholly preserved not only the orthography but also the punctuation and the paragraph divisions of the original sources. For technical reasons, the character *ŕ* here stands for a velar fricative *γ* reportedly present in the Northern dialect, and the character *η* stands for a velar nasal. We apply them instead of other Cyrillic-based symbols used in the sources. We have also provided versions of these texts in our own phonological transcription, with glosses. The second part of the chapter (nos. 6–14) comprises texts recorded in the course of our fieldwork among the Bikin Udihe. They are published here for the first time. Consequently, texts no. 1–4 represent the Northern dialect, while all the other texts are from the Southern (Bikin) dialect.

In texts 6–11 we have used the following conventions. Unlike in the main text of the grammar, in this chapter we have marked "stylistic" phonological variations (see 2.1.5), such as vowel reduction (a reduced vowel is included in brackets) or vowel lengthening. Certain allophonic, free and idiolectal phonetic variations may also be reflected; on these see 2.1.3, 2.1.4, 2.2.3. Thus we were trying to preserve the individual properties of the speaker to some extent, remaining within the phonological transcription as much as possible. The symbols used are as follows:

{ }Russian words that are not integrated into the language, or occasionally entire sentences when the speaker slips into Russian. The same symbol marks the corresponding word in the translation. However, if the Russian word doubles a Udihe word in the same grammatical function, it is not repeated in the translation.

[ ]   Passages of the text added by another speaker while listening to the text.

...   Places that remained unclear.

< >   Occasions when the storyteller accidentally uses one word instead of another and normally corrects himself or herself afterwards.

( )   In the Udihe text the brackets indicate parts of the word omitted by the speaker. In the translations they show words that do not have a counterpart in the Udihe sentence, as is the usual practice in this grammar.

The translations are neither entirely free, nor entirely literal. We have left some interjections untranslated, and also the "replacing" indefinite particle *aŋi*, which is used when the speaker is looking for the right word (9.6.4.4).

1. *Kuti* 'Tiger' (Čarušin 1935: 17)

Minti buadifi kuti wac'a biə, ŋamahi buadu-tənə əgdi. Kuti nāŋgi dīŋkini bihini. Iŋaktani soligiʒi, p'aligiʒi kədəŋəŋə ōi. Utəmi mōkt'oi, ōkt'oi donini utawa əuji isə.

Kəigə ʒugdidu siŋəwə wākcaini, kahi bua xuəndini oloxiwə wākcaini, kuti-tənə naktawə wākcaini, nī 'owəni – mujiwə, jehæwe-də, xōŋtowə-də wāini. Nīwə-də wāini. Slonoʒi-tənə kuti ŋələini. Ŋamahi buadu wākcai nī slonolo ūŋkasi, kutiwə wākcaiti, xaisi nāwə-də xoktodini uləiti tiŋmələgəni.

Minti	*ba:-di-fi*		*kuti*	*wac'a*	*bie,*	*ñamahi*
we	place-DAT-1PL.IN		tiger	few	be.PRES.HAB	warm
ba:-du	*tene*	*egdi.*				
place-DAT	CONT	many				

There are few tigers in our forests, but in warm countries there are many of them.

Kuti	*na:ŋgi*	*di:ŋki-ni*	*bihi-ni.*
tiger	manchu.bear	size-3SG	be-3SG

The tiger is similar in size to the Manchu bear.

Iŋakta-ni	*soligi -zi*	*p'aligi-zi*	*kede-ñeñe*	*o:-i.*
fur-3SG	orange-INST	black-INST	stripy-ADJ	make-PRP

Its coat has orange and black stripes.

Utemi	*mo:kt'oi*	*o:kt'oi*	*do-ni-ni*	*uta-wa*
therefore	bushes	grasses	inside-DAT-3SG	that-ACC
e-u-ji	*ise.*			
NEG-PAS-PRP	see			

Hence it cannot be seen in the grass and bushes.

Keige zugdi-du   *siŋe-we*   *wakca-ini,*   *kahi*   *ba:*
cat   house-DAT   mouse-ACC   hunt-3SG   marten place
xuon-di-ni   *oloxi-we*   *wakca-ini,*   *kuti tene*   *nakta-wa*
top-DAT-3SG   squirrel-ACC   hunt-3SG   tiger CONT   boar-ACC
wakca-ini,   *ni:*   *'o-wo-ni*   *mui-we*
hunt-3SG   man   domestic.animal-ACC-3SG   horse-ACC
jah-wa-da   *xoŋto-wo-do*   *wa-ini.*
cow-ACC-FOC   other-ACC-FOC   kill-3SG

The cat hunts for mice in the house, the marten hunts for squirrels in the forest, and the tiger hunts for boars and kills men's domestic animals, horses, cows and others.

Ni:-we-de   *wa-ini.*
man-ACC-FOC   kill-3SG

It also kills men.

Slono-zi   *tene*   *kuti*   *ŋele-ini.*
elephant-INST   CONT   tiger   be.afraid-3SG

But it is afraid of the elephant.

Ñamai   *ba:-du*   *wakca-i*   *ni:*   *slono-lo*
warm   place-DAT   hunt-PRP   man   elephant-LOC
u:ŋ-ka-si   *kuti-we*   *wakca-iti,*   *xaisi*
sit-PERF-PC.SS   tiger-ACC   hunt-3PL   also
na:-wa-da   *xokto-di-ni*   *ule-iti*
ground-ACC-FOC   road-DAT-3SG   dig-3PL
tiŋme-lege-ni.
fall-PURP-3SG

In warm countries hunters sitting on elephants hunt for tigers, and they also dig (holes) in the ground on the roads so that the tiger falls inside.

2. *Ada* 'Crossing the mountain' (Kormušin 1998: 14)

While rendering Kormušin's transcription we have removed some diachritic signs.

Хоӈо буатиги уэлэми кӕмбувасуйи. ӡэуӈиɣ, мэнэ а'пти кеукӕмбувасийти, ӡевэ уэлэми. Кӕмбувасефи амӕлан' сэхи раhиӡини хулайти. ӡеуэни хулами диганайти. Мэнэ най ӡавайти хоӈто улилэ ӈэнэ. Уливэ умилэми мэнэ наӈиӡи солийти, согила'си умийти. Эмугдэй элэгэни уний. Кӕмбуга войти. Ади ни бими, адима войти. Кӕмбуга ӡолони ӡаӈа нэдэйти, йалаh, утадиги ӡэувэ, а'пти нэдэйти. Буатиги диганам диганам

кэси гэлийти. Уйолони сэӈке нэдэйти. Сэӈке, зэу – кеу зэгдийни. Ни
хэӈкийни:
– Эзи-дэ сулэвэнэ, айанзи ва:ксаванзайи, н'ɣнɵíи-дэ айа ванзэйи, кэси
биванзи.

Xoŋto	*bua-tigi*		*we:-le-mi*		*kämbu-wasi-u-ji.*
other	place-LAT		mountain-V-INF		sacrifice-DIS-PAS-PRP

Crossing the mountain (going) to another place one makes a sacrifice.

Zeu-ŋi:,		*men-e*	*'apti*	*käu*	*kämbu-wasi:-ti*
food-AL.REF		REF-0	provisions	all	sacrifice-DIS-3PL
zie-we		*we:-le-mi.*			
crest-ACC		mountain-V-INF			

They sacrifice all their food and provisions while crossing the crest of a
mountain.

Kämbu-wasi-e-fi		*amä:-la-ni*		*se:xi*
sacrifice-DIS-PP-SS.PL		after-LOC-3SG		cloth
pahi-zi-ni		*xula-iti.*		
piece-INST-3SG		tie-3PL		

After making a sacrifice they tie a piece of cloth (to a tree).

Zie-we-ni		*xula-mi*		*digan-a-iti.*
crest-ACC-3SG		tie-INF		say-0-3PL

While tying it on a crest of the mountain they speak.

Men-e	*na:-i*	*zawa-iti,*	*xoŋto*	*uli-le*	*ŋene.*
REF-0	earth-REF	take-3PL	other	river-LOC	go

They take (pieces) of their earth and go to another place (literally: river).

Uli-we	*umi-le-mi*	*men-e*	*na:-ŋi-zi*		*soli:-ti,*
water-ACC	drink-SING-INF	REF-0	earth-AL-INST.REF		mix-3PL
sogil'a-si		*umi:-ti*	*emugde-i*		
mix.PERF-PC.SS		drink-3PL	stomach-REF		
e-lege-ni		*uni.*			
NEG-PURP-3SG		hurt			

Drinking water they mix it with their earth, they drink it after having mixed it
so that the stomach does not hurt.

Kämbuga	*wo-iti.*
altar	make-3PL

They make an altar.

Adi	*ni:*		*bi-mi*	*adi-me*		*wo-iti.*
how.many	man		be-INF	how.many-ACC		make-3PL

How many people there are, so many they make.

Kämbuga	*zolo-ni*	*zaŋa*	*nede-iti,*	*jalah,*	*uta-digi*
altar	stone-3SG	coal	put-3PL	coal	that-ABL

zeu-we	*'apti:*	*nede-iti.*
food-ACC	provisions.REF	put-3PL

They put hot coal on the altar stone, then they put their food, their provisions.

Bua-tigi	*digan-a-m(i)*	*digan-a-m(i)*	*kesi*	*geli:-ti.*
place-LAT	say-0-INF	say-0-INF	luck	ask-3PL

They talk to God, ask for luck.

Ujo-lo-ni	*seŋkie*	*nede-iti.*	*Seŋkie,*	*zeu, käu*	*zegdi:-ni.*
top-LOC-3SG	ledum	put-3PL	ledum	food all	burn-3SG

On the top they put some ledum. Ledum, food, everything is burning.

Ni:	*xeŋki:-ni,*	*"E-zi-de*		*su:le-wen-e,*	
man	bow-3SG	NEG-IMP.2SG-FOC		ill-CAUS-0	

ajan-zi	*wakca-wan-za-ja,*	*ñühö-ŋi-de*		*aja*
good-INST	hunt-CAUS-SUBJ-IMP.2SG	sable-AL.REF-FOC		good

wan-za-ja,	*kesi*	*bi-wen-z(e)-i."*
kill-SUBJ-IMP.2SG	luck	be-CAUS-SUBJ-IMP.2SG

People are bowing (and saying:) "Don't make us ill, make us hunt well, make us kill sables well, make us have luck."

3. *Sukpaj* 'The Sukpai' (Sunik 1968:231–232)

Сукпај б'иаʔасадун'і, буа хуэндун'и омосого с'итэ багдіан'і. октомо јатаʔуду гэктим'и багдіан'і, чіндаʔа дэл'им'и, гэктиду багдіан'і. эн'ин'и тэгэд'ии каптаʔас'і зугдітігі газеан'і. уті батава зуа꙳чізі гэгб'и꙳иэти. кэс'им'и, зобом'і багдеан'і, зуа сугзавӑ дігам'ē, туэ улэвэ дігам'ē, утэ-бэдэ н'інаан'і. имэхи колі одојс'ін'і сагді хотолȱ татус'інаан'і. татус'іас', эмэг'иэн'і, мэнэ багдіам'і кэсэкчээм'и зіатігіі, утиꙥэтувэ татус'інаꙥгіан'. мэнэ н'иф'и зулэйхи ꙥэнэлэн'и татус'інаꙥан'і. минти зуа꙳чі татус'іан'і-бэдэ зулэйхи ꙥэнэзэіэф'и.

Sukpai	*b'äsa-du-ni*	*ba:*	*xo:n-du-ni*	*omo-s'o-go*
Sukpai	river-DAT-3SG	place	top-DAT-3SG	one-ADJ-FOC

sita	*bagdi-e-ni.*
child	be.born-PAST-3SG

On the river Sukpai in the taiga a child was born.

Okto-mo   *jat'au-du*   *gekti-mi*   *bagdi-e-ni,*
grass-ADJ   birth.tent-DAT   freeze-INF   live-PAST-3SG
čind'a   *dieli-mi*   *gekti-du*   *bagdi-e-ni.*
bird   fly-INF   freeze-DAT   live-PAST-3SG
He was born frozen in a birth tent, in the cold time when birds are flying away.

Eni-ni   *tege-di:*   *kapt'a-si*   *zugdi-tigi*
mother-3SG   gown-DAT.REF   wrap.PERF-PC.SS   house-LAT
gazi-e-ni.
bring-PAST-3SG
His mother brought him home having wrapped him in her clothes.

Uti   *b'ata-wa*   *Zuanči-zi*   *gegbi-ŋi-e-ti.*
that   boy-ACC   Zuanchi-INST   call-REP-PAST-3PL
They named this boy Zuanchi.

Kesi-mi   *zogbo-mi*   *bagdi-e-ni,*   *zua*
suffer-INF   trouble-INF   live-PAST-3SG   summer
sugdä-wa   *diga-mie,*   *tue*   *ule-we*   *diga-mie*
fish-ACC   eat-INF   winter   meat-ACC   eat-INF
ute   *bede*   *ni:-ne-ni.*
that   like   man-PL-3SG
He lived in sufferings and troubles, in summer he was eating fish, in winter –
meat, as did (all) his people.

Imexi   *koli*   *odo-isi-ni*   *sagdi xoto-lo*
new   law   become-PC-3SG   large city-LOC
tatusi-ne:-ni.
study-DIR.PAST-3SG
When the new power came he went to study in a large city.

Tatusi-ge-si   *eme-gi-e-ni*   *men-e bagdi-e-mi*
study-PERF-PC.SS   come-REP-PAST-3SG   REF-0 live-PP-REF
kese-kce:-mi   *zei-tigi:*   *uti*   *getu-we*
suffer-DUR.PP-REF   kinsman-LAT.REF   that   PL-ACC
tatusi-ne-gi-e-ni.
teach-DIR-REP-PAST-3SG
After study he returned to the people with whom he lived suffering, he went to
teach them.

Men-e ni:-fi   *zuleixi*   *ŋene-le:-ni*   *tatusi-ne:-ni.*
REF-0 man-REF.PL   forwards   go-PURP-3SG   teach-DIR.PAST-3SG
He went to teach his people so that they would go forwards.

Minti   Zuaŋči   tatusi-e-ni   bede   zuleixi   ŋene-zeŋe-fi.
we   Zuanchi teach-PP-3SG   like   forwards   go-FUT-1PL.EX
We will go forwards, as Zuanchi was teaching (us).

4. *Ibenewe niŋka igbe:ni* 'How the Chinese drove away the Japanese'
(Simonov, Kjalundzjuga, and Xasanova 1998: 320)

Ниӈказиѓа багдиати. Наму буѓасатиѓини эзэти игбэни (вазаӈази игбэни)
омо миӈга нйвэ: хаталава, нинтава, мэнэ чаваи.

Ути-гэту мэнэ сӭзи багдилиати – ибэнэ одоти. Удиэ-бэдэ каваӈисими,
багдилиати. Амаихи дауми, в'алилафаи, эсити мутэ. Мэнэ гӯзи мэнэ
багдилиати.

Niŋka-ziga   bagdi-e-ti.
Chinese-PL   live-PAST-3PL
The Chinese lived.

Namu bugasa-tigi-ni   eze-ti   igbe:-ni,
sea   island-LAT-3SG   tsar-3PL   chase.PAST-3SG
wa-zaŋa-zi   igbe:-ni,   omo   miŋga   ni:-we,
kill-FUT-INST chase.PAST-3SG   one   thousand   man-ACC
xatala-wa,   ninta-wa,   men-e   čawa-i.
girl-ACC   woman-ACC   REF-0   army-REF
Their tsar drove away to a sea island one thousand people, men, girls, women,
and his army, because (otherwise) they had to be killed.

Uti   getu   men-e   seh-zi: bagdi-li-e-ti,
that   PL   REF-0   clan-INST.REF   live-INC-PAST-3PL
ibene   odo:-ti.
Japanese   become.PAST-3PL
They started to live in their own clans and become Japanese.

Udie bede   kawa-ŋisi-mi   bagdi-li-e-ti.
Udihe like   tent-V-INF   live-INC-PAST-3PL
They started living like the Udihe, making (grass) tents.

Amäixi   dau-mi   w'ali-la-fai   e-si-ti
backwards   cross-INF   fight-PURP-SS.PL   NEG-PAST-3PL
mute.
can
They couldn't go back across (the sea) in order to fight.

Men-e	*gu:-zi*		*men-e*	*bagdi-li-e-ti.*
REF-0	way.of.life-INST.REF		REF-0	live-INC-PAST-3PL

They started living in their own way by themselves.

5. *Ogbö e:xi-de* 'Elk and Frog' (Perexval'skaja 1991c: 1–2)

Огбё э'хи-зуӈэ багдиэти. Гэ, огбё гунэйни:
– Гэлинигэзэфи, эхэй, минзуӈэ. Тукязафи сагди наму эгэлэ, ӈиц'а наму
эгэлэ.
– Гэ, тукязэ!

   Гулиниэти-дэ. э'хи-гдэ тэтигэӈиэни огбё хэйэтигини. Огбё
тукя'ни-э-э. Ляси тукя'ни, тукя'ни. Сагди наму эгэлэ, ӈиц'а наму эгэлэ.
Тукя'ни-э-э. Дэуми экэ'ни. экэйси ути экиндини-дэли э'хи хэйэдигини
хэтигэнэ'ни. Огбё диһаӈкини:
– э'хэй!
– А?
– Айа, кэту маӈга бий си. Би гэйэ эмэгэ'й. Гэ, ња гулинэзэфи!

   э'хи ња хэйэтигини. Гэ, ња тукя'ни огбё, лоӈцолиги, лоӈцолиги. Тукяй,
тукяй. Ња илэ-дэлэ экэ'ни.
– э'хэй!
– А?
– Айа, эйни имэму эй э'хи!

   Ња гулиниэни эй-тэнэ. Тукя'ни, тукя'ни. элэ, атанами будэ'ни-э-э огбё.

Ogbö	*e:xi*	*zuŋe*	*bagdi-e-ti.*
elk	frog	both	live-PAST-3PL

Once upon a time there lived an Elk and a Frog.

Ge	*ogbö*	*gun-e-ini*	*"Geinige-ze-fi,*	*e:xe-i,*
well	elk	say-0-3SG	compete-SUBJ-1PL.IN	frog-VOC

min-zuŋe.
me-both

Well, the Elk said: "Frog, let us compete (in running) against each other.

Tukä-za-fi	*sagdi*	*namu*	*egelie,*	*ŋic'a*	*namu*	*egelie".*
run-SUBJ-1PL.IN	big	sea	around	small	sea	around

Let us run around the big sea, and around the small sea."

"Ge tukä-za!"
well run-SUBJ

"Well, let us run!"

Gulini-e-ti-de.
go-PAST-3PL-FOC
They left.

E:xi-gde   *xetige-ŋi-e-ni*   *ogbö*   *xeje-tigi-ni.*
frog-CONT   jump-REP-PAST-3SG   elk   forehead-LAT-3SG
And the Frog jumped on the Elk's forehead.

Ogbö   *tukä:-nie.*
elk   run.PAST-3SG
The Elk ran.

Läsi   *tukä:-ni,*   *tukä:-ni.*
very   run.PAST-3SG   run.PAST-3SG
It was running very much.

Sagdi *namu* *egelie,*   *ŋic'a*   *namu*   *egelie.*
big   sea   around   small   sea   around
Around the big sea, around the small sea.

Tukä:-nie.
run.PAST-3SG
It was running.

Deu-mi   *eke:-ni.*
get.tired-INF   stop.PAST-3SG
It got tired and stopped.

Eke-isi   *uti*   *ekindi-ni-deli*   *e:xi*
stop-PC   that   when-3SG-CONT   frog
xeje-digi-ni   *xetige-ne:-ni.*
forehead-ABL-3SG   jump-DIR.PAST-3SG
When it stopped, the Frog jumped from its forehead.

Ogbö *diaŋ-ki-ni*   *"E:xie-i!".*
elk   say-PAST-3SG   frog-VOC
The Elk said: "Frog!"

"A?"
yes
"Yes?"

"Aja,   ketu   maŋga   bi: si.
well   very   strong   be.2SG you
"Well, you are very strong.

Bi   geje   eme-gi-e-i.
me   with   come-REP-PAST-2SG
You came here together with me.

Ge   ña   guline-ze-fi!"
well   again   go-SUBJ-1PL.IN
Well, let us go again!"

E:xi   ña   xetige-ŋi-e-ni   xeje-tigi-ni.
frog   again   jump-REP-PAST-3SG   forehead-LAT-3SG
The Frog jumped again onto its forehead.

Ge   ña   tukä:-ni   ogbö,   loŋcoligi   loŋcoligi.
well   again   run.PAST-3SG   elk   long.legged   long.legged
Well, the long legged Elk ran off again.

Tukä-i,   tukä-i.
run-PRP   run-PRP
It is running, running.

Ña   i:-le-dele   eke:-ni.
again   what-LOC-IND stop.PAST-3SG
It stopped again somewhere.

"E:xie-i!"
frog-VOC
"Frog!"

"A?"
yes
"Yes!"

"Aja,   e-ini   imemu ei   e:xi!"
well   NEG-3SG   drop   this   frog
"Oh, this Frog will not drop off!"

Ña   gulini-e-ni   ei-tene.
again   go-PAST-3SG   now-CONT
Then it went again.

Tukä:-ni,   tukä:-ni.
run.PAST-3SG run.PAST-3SG
It was running, running.

Ele   atana-mi   bude:-nie   ogbö.
soon   be.out.of.breath-INF   die.PAST-3SG elk
Soon the Elk collpsed exhausted and died.

6. Song (sung by Nadežda Pavlovna Kukčenko)

Ña:-wa   kaja-m(i)   kai-ŋku-zi   kaja-m(i)
skin-ACC   brake-INF   brake-N-INST   brake-INF
jexe-ze-m(i).
sing-SUBJ-1SG
I will sing about how we brake leather.

Ge: gune:ŋ kai-ŋku-zie   gune   ña:-wa   kai-za-mie
Well   EV   brake-N-INST   EV   skin-ACC   brake-SUBJ -1SG
Well, I will brake skin with the brake for skins

sita-na-mi   uŋta-na-ti   wo-logo-mi   gune:ŋ,
child-PL-REF   shoe-DEST-3PL   make-PURP-SS   EV
to make shoes for my children,

ami-tie   uŋta-na-ni   wo-logo-mi   kai-za-mie.
father-3PL   shoe-DEST-3SG make-PURP-SS   brake-SUBJ-1SG
to make shoes for their father I will brake skin.

Käŋa-da   ña:-wa-ni   nakta-da   ña:-wa-ni
deer-FOC   skin-ACC-3SG   boar-FOC   skin-ACC-3SG
kai-za-mie   gune:ŋ
brake-SUBJ-1SG   EV
I will brake the deerskin and the boar skin

käŋa   ña:-ẓi-ni   tene   xeigi-ne-tieŋ   wo-logo-mi
deer   skin-INST-3SG   CONT   trousers-DEST-3PL   make-PURP-SS
gune:ŋ.
EV
to make trousers for them of deer skin.

Eili-ze-mie   ña:-wa   gune   kai-za-mi   gune
gown-SUBJ-1SG   skin-ACC   EV   brake-SUBJ-1SG   EV

jewe-jewe.
INTER-INTER
I will dress the skin and brake it.

7. *Ulikte* 'Shaman lard' (told by Nadežda Pavlovna Kukčenko)

Sama	*ulikte*	*ulikte-si:-ni.*
shaman	lard	lard-V-3SG

The shaman prepares the shaman lard.

Nakta	*imo:-wo-ni*	*xuaji-e-k,*	*kuliga*	*duo-ni*
boar	fat-ACC-3SG	cut-PAST-EXPR	snake	shape-3SG
dili-we-ni		*kuliga*	*duo-n(i)*	*bede*	*wo:-k.*
head-ACC-3SG		snake	shape-3SG	like	make.PAST-EXPR

He cuts the boar fat in the form of a snake, makes a head.

Uti	*aŋi-we*	*joxo-wo*	*toxolo:-k,*	*uli-we.*
that	IND-ACC	pot-ACC	put.on.fire.PAST-EXPR	water-ACC

He puts a pot on the fire and water.

Joxo	*do-lo-ni*	*nede-iti*	*ulikte-we*	*tene*
pot	inside-LOC-3SG	put-3PL	lard-ACC	CONT
ulikte-ne-ti		*olokto-lo:-ni.*		
lard-DEST-3PL		cook-PC-3SG		

They put shaman lard in a pot for cooking.

[*Ulikte,*]	*uti*	*joxo*	*wei-le-ni*	*mo:-wo*
lard	that	pot	on-LOC-3SG	stick-ACC
xeke:-k		*ulikte*	*agbu-le:-m(i).*	
tie.PAST-EXPR		lard	take-PC-SS	

He ties a little stick above the pot in order to take out the lard.

Ulikte	*a:da-lisi-ni,*	*a:da ...*	*bi-si-ni*	*šaman*
lard	get.ready-CC-3SG	ready	be-PC-3SG	shaman
em'e	*kä:-tigi-ni*	*joxo-ti(gi),*	*ŋala-zi*	*agbu-ini*
come.PERF	side-LAT-3SG	pot-LAT	hand-INST	take-3SG
ulikte-we.	*ŋala-zi*	*agbu-o:-k.*		
lard-ACC	hand-INST	take-PAST-EXPR		

When the lard is ready, the shaman comes to the pot, and takes the lard with his hands.

Uti	*mö:,*	*ulikte*	*mö:-lo-ni*			*[zaw'a-si]* ...	
that	neck	lard	neck-LOC-3SG			take.PERF-PC.SS	

mo:-lo	*xeke:-k,*		*uta*	*tu:*	*sigbi:*	*imo:-wo,*
tree-LOC	tie.PAST-EXPR		that	all	squeeze.PRP	lard-ACC

tu:	*sigbi:*	*uli-we-ni.*
all	squeeze.PRP	water-ACC-3SG

He takes the lard off the fire with his hands. He holds by its neck, ties (the lard)
to the stick, and squeezes it all, squeezes the water.

Tu:	*sigbi-ge-si*	*ŋala-zi*	*zaw'a-si*
all	squeeze-PERF-PF.SS	hand-INST	take.PERF-PC.SS

gusi:.
play.PRP

Having squeezed it all, then he takes it with his hands, and plays.

Šamani-le-ini.
shamanize-V-3SG

He shamanizes.

Lauleli:	*lauli:*	*lauli:*	*lauli:* ...
dance.PRP	dance.PRP	dance.PRP	dance.PRP

He dances, dances.

Lauli:	*lauli:*	*gusi-m(i)*	*laulü-m(i)*	*laulü-m(i)*	
dance.PRP	dance.PRP	play-INF	dance-INF	dance-INF	

laulü-m(i)	*ni:*	*teun-tigi-ni...*	*laulü-m(i)*	*gusi:-ni*	*uti*
dance-INF	man	all-LAT-3SG	dance-INF	play-3SG	that

ulikte-zi.
lard-INST

He dances and plays dancing for all the people dancing with the lard.

Utebe	*gusi-mi*	*metu-ge-si*	*ña*
so	play-INF	finish-PERF-PC.SS	again

olokto-gi-e-k,	*olokto-m(i)*	*a:da-isi-ni.* ...
cook-REP-PAST-EXPR	cook-INF	ready-PC-3SG

So he finishes playing and cooks it again till it is ready.

Gele-i	*ni:*	*tu:*	*te:g'e-si*	*zueze*	*ned'e-si,*
ask-PRP	man	all	sit.PERF-PC.SS	table	put.PERF-PC.SS

gele-i	*ni:*	*tu:*	*te:*	*g'e-si*	*solim(i)*	*olokt'o,*
ask-PRP	man	all		sit.PERF-PC.SS	dried.fish	cook.PERF

solimi.
dried.fish

All the audience sits down and sets up the table, they sit down, and cook a meal out of the dried fish.

Ña	*aŋi*	*uli-zi*	*{èto}*	*dawa*		*og'ou,*
again	IND	water-INST	this	Siberian.salmon		dry

dawa		*olokt'o-si*		*solümi*	*wo-iti.*
Siberian.salmon		cook.PERF-PC.SS		dried.fish	make-3PL

They cook {that} salmon again with water, and make a meal out of it.

Ge,	*ute*	*solimi-zi*	*diga-iti*		*uti*	*ulikte-we*
well	that	dried.fish-INST	eat-3PL		that	lard-ACC

imo:-wo	*tu:*	*tu:*	*dig'a-si.*
fat-ACC	all	all	eat.PERF-PC.SS

They eat lard and fat with this dried fish. They eat everything.

8. *Oloxi waŋba* 'Squirrel and Turtle' (told by Nadežda Pavlovna Kukčenko)

Oloxi	*waŋba*	*zuŋe*	*anda-mule*	*bagdi-e-tie.*
squirrel	turtle	both	friend-N	live-PAST-3PL

Squirrel and Turtle lived as friends.

Bagdie,	*oloxi*	*gune:*	"*Ge,*	*ŋen(e)-ze-f(i)*		*minti,*
live.PRP	squirrel	say.PP	well	go-SUBJ-1PL.IN		we

aŋi-we	*seutigi-we*		*digan-a-za-fi.*"
IND-ACC	cone-ACC		eat-0-SUBJ-1PL.IN

They lived, Squirrel said: "Well, let us go to eat cedar cones."

Waŋba	*gune:-ni*		"*Ge,*	*ŋene-ze-f(i).*
turtle	say.PAST-3SG		well	go-SUBJ-1PL.IN

Turtle said: "Well, let us go.

Bi	*ono*	*tukti-ze?*"
me	how	climb-SUBJ

(But) how shall I climb up?"

Oloxi	*e-ini-de*		*mute,*	"*Bi*	*tukti-ze-m(i).*
squirrel	NEG-3SG-FOC		can	me	climb-SUBJ-1SG

(Since) it cannot (climb), Squirrel (said:) "I'll climb.

Sin-du	*ata-mi*		*tugbu*	*seutige-we?*"
you-DAT	NEG.SUBJ-1SG		drop	cone-ACC

Won't I drop cones (down) to you?"

ŋene:-tie,   *seutige*   *mo:-lo*   *i:ne:-tie.*
go.PAST-3PL   cone   tree-LOC   come.PAST-3PL
They went, came up to a cedar tree.

Oloxi   *tuktie,*   *oloxi*   *tuktie,*   *waŋba-ŋi-ni*
squirrel   climb.PRP   squirrel   climb.PRP   turtle-AL-3SG
xegienu   *alasie.*
below   wait.PRP
Squirrel is climbing, climbing, Turtle is waiting below.

Oloxi-ŋi-ni   *seutige-we*   *diga-li-e-nie.*
squirrel-AL-3SG   cone-ACC   eat-INC-PAST-3SG
Squirrel began to eat cones.

Käkčike   *nix'e,*   *käkčike*   *nix'e,*   *käkčike.*
INTER   make.PERF   INTER   make.PERF   INTER
Crack-crack, it goes, crack.

"Si   *j'eu*   *nixe-i*   *uta-du?"*
you   what   do-2SG   that-DAT
"What are you doing there?"

"Bi   *ei*   *seutige-we*   *ikteme-si-mi,*   *ceme-n(i)-de*   *anči,*
me   now   cone-ACC   gnaw-IM-1SG   kernel-3SG-FOC   no
afäktu   *m'ei-de.*
empty   only-FOC
"I am gnawing the cones, there are no kernels, nothing but empty ones.

Uta-wa   *ikteme-si-mi,*   *afikäkči*   *afikäkči."*
that-ACC   gnaw-IM-1SG   INTER   INTER
I am gnawing them, crack-crack."

Ge,   *ute*   *ikteme-si:-we-ni*   *ut(i)*   *alasi:,*
well   that   gnaw-IM.PRP-ACC-3SG   that   wait.PRP
waŋba   *alasi:*   *ono-ko*   *nixe-m(i)-de?*
turtle   wait.PRP   how-IND   do-INF-FOC
Well, Turtle is waiting for (Squirrel) gnawing nuts, what can it do waiting?

Oloxi   *tugbu-o:-ni*   *seutige-ni*   *mende-de.*
squirrel   drop-PAST-3SG   nut-3SG   whole-FOC
Squirrel dropped a whole pine cone.

Aŋi   tugbu-si:-ni,   tugbu   jaza-ta,   uti   nixe:-ni.
IND   drop-IM-3SG   drop   of.course-FOC   that   do.PAST-3SG
It dropped a lot, dropped of course, so it was.

Tugbu-si:-ni,   uti   waŋba-ŋi-ni   zawa-mi   ŋiŋme:-ni
drop-IM-3SG   that   turtle-AL-3SG   take-INF   swallow.PAST-3SG
seutige-we   mende-de,   ŋiŋme:-ni   mende-de.
cone-ACC   whole-FOC   swallow.PAST-3SG   whole-FOC
It dropped (a nut), Turtle picked it up and swallowed the whole cone.

Eu-gi-e-ni,   *oloxi   gune:-ni*   *"J'e-uxi*
go.down-REP-PAST-3SG   squirrel say.PAST-3SG   what-LAT
ŋene-te   bi   seutige-ŋi:?"
go-FOC   me   cone-AL.SG
Squirrel came down and said: "Where has my cone gone?"

"Bi   ŋiŋme:-i   bi: uta-wa.
me   swallow.PP-1SG   be.1SG that-ACC
"I have swallowed it."

"J'e-we   ŋiŋme:-i   si   uta-wa?
what-ACC   swallow.PAST-2SG   you   that-ACC
"Why have you swallowed it?

Bi   sin-e-we   xeŋgi-ze-m(i)."
me   you-0-ACC   trample-SUBJ-1SG
I shall trample on you."

Xeŋgisi-li-e-ni   *aka-la,*   *xeŋgisi-mie*
trample-INC-PAST-3SG   back-LAT   trample-INF
jakta-gi: *jaza-ta,*   *seutige-ŋi-we-ni*
belch-REP.PRP   of.course-FOC   cone-AL-ACC-3SG
jakta-gi:.
belch-REP.PRP
(Squirrel) began to trample on (Turtle's) back, and when it was trampling,
(Turtle) belched up the cone.
Jakta ga:-gi-e-k,   *ña   [weixi]*
belch take-REP-PAST-EXPR   again   up
tukti-gi-e-k,   *seutige-ŋi: ña   uta-wa*
climb-REP-PAST-EXPR   cone-AL.REF   again that-ACC
diga-li-gi-e-ni.
eat-INC-REP-PAST-3SG I
(Squirrel) picked it up and climbed up again and began to eat cones again.

Afikäkči   afikäkči   ikteme-si:-ni.
NTER   INTER   gnaw-IM-3SG
Crack-crack, Squirrel is gnawing the nuts.

"Ge,   ele,   anči   seutige,   ŋene-ze-fi-ge,
well   enough   no   nut   go-SUBJ-1PL.IN-HORT
ge   ŋene-ze-fi-ge.
well   go-SUBJ-1PL.IN-HORT
"All right, enough there are no nuts left, let's go."

Uti   waŋba-ŋi-ni   tagda-i   jaza-ta,   diga-mu:i-ni,
that   turtle-AL-3SG   get.angry-PRP   of.course-FOC   eat-DES-3SG
xeŋgi-si-e-ni,   jaktagi-e-ni.
trample-IM-PAST-3SG   belch-PAST-3SG
Turtle was angry, of course, (when it) was going to eat, (Squirrel) trampled on it, it belched.

"Bi-de   timana   gele-ze-mi   sin-e-we.
me-FOC   tomorrow   ask-SUBJ-1SG   you-0-ACC
"Now I will invite you tomorrow.

Si-de   timana   min-tigi   eme-i,   zima-zaŋa-i.
you-FOC   tomorrow   me-LAT   come-2SG   visit-FUT-2SG
Now you should come tomorrow and visit me.

ŋene-ze-fi-ge."
go-SUBJ-1PL.IN-HORT
Let us go."

ŋene:-ti,   men-e-men-e   zugdi-tigi:
go.PAST-3PL   REF-0-REF-0   house-LAT.REF
ŋene:-ni.
go.PAST-3SG
They went, each of them went to its own house.

"Timana   min-tigi   zima-ta-i-ze,   oloxi."
tomorrow   me-LAT   visit-PERM-2SG-HORT   squirrel
"Come to me tomorrow, Squirrel."

"Iŋke, (g)uŋ-ki-ni,   zima-ta-m(i)-ze."
OK   say-PAST-3SG   visit-PERM-1SG-HORT
"All right, it said, I will come."

Waŋba   zugdi: ŋeni-e-k,   muisi-ni   "Bi
turtle   house.LAT   go-PAST-EXPR   think-3SG   me
uti   oloxi-we   eineŋi zawa-zaŋa-i,   bi   uta-wa
that   squirrel-ACC   today   take-FUT-1SG   me   that-ACC
kesu-si-zeŋe-i   ñaŋa-da.
torture-IM-FUT-1SG   little-FOC
Turtle came home and thought: "Today I will take (revenge on) Squirrel, I will torture it a little."

ŋeni-e-k   uli-tigi,   uli-tigi   og'ou   t'a
go-PAST-EXPR   river-LAT   river-LAT   dry   fallen.tree
bi:-li.
be-3SG
It went to the river, there was a dry fallen tree (leading) to the river.

Aŋi   toŋo:-wo   xeke-si-e-k   aŋi-lege-mi   uti …
IND   loop-ACC   tie-IM-PAST-EXP   IND-PURP-SS   that
oloxi-we   zawa-la:-m(i) …
squirrel-ACC   take-PURP-SS
(Turtle) tied loops to catch that Squirrel.

Xeku-zi   tu: toŋofu toŋo: lo-si-e-n(i),
rope-INST   all   loop   loop   hang-IM-PAST-3SF
nesi-e-ni   uti   aŋi-le   t'a-la
put-PAST-3SG   that   IND-LOC   fallen.tree-LOC
uli-tigi,   t'a   bie   e-uze-le,
river-LAT   fallen.tree   be.PRES.HAB   this-N-LOC
xeke: uti   toŋofu-ziga   aŋi-we   xeku   mei-we-ni.
tie.PP   that   loop-DIM   IND-ACC   rope   strong-ACC-3SG
It made the loops on the rope, put it on the fallen tree (leading) to the river, there was a fallen tree there, tied the small loops on a strong rope.

Ge   timana   eme:-nie   oloxi em'e,
well   tomorrow   come.PAST-3SG   squirrel come.PERF
em'e,   em'e,   ge   em'e.
come.PERF   come.PERF   well   come.PERF
Well, next day Squirrel came, it came.

"Ei,   bi ono deu-ze-m(i)   si   e:-tigi:-ne?"
hey   me how cross-SUBJ-1SG   you   side-LAT.2SG-CONT
"Hey, how should I cross the river to your bank?"

"*Uti   t'a-li   t'a-la-i.*"
that   fallen.tree-PROL   tree-V-IMP.2SG
"Go along the fallen tree."

"*J'eu bi:-ni   uti   montom-ziga-i   uti   t'a   xo:n-dile-ni?*"
what be-3SG that   circle-PL-FOC   that   tree   top-LOC-3SG
"Why are circles there on the fallen tree?"

"*Aja, uti   bei   ute   bede   nesi-e-m(i).*"
good that   in.vain that   like   put-PAST-1SG
"That's all right, I have put them for no particular reason."

E,   (u)te   t'a   wei-le-ni   t'a-la-li-e-ni
INTER   that   tree   on-LOC-3SG   tree-V-INC-PAST-3SG
oloxi.
squirrel
Squirrel began to cross the river along the fallen tree.

T'a-la-m(i)   xeŋd'e   jaza-ta   uti,   aŋi
tree-LOC-INF   step.PERF   of.course-FOC   that   IND
toŋofu-le-ŋi   xeŋd'e   jaza-ta
loop-LOC-3SG   step.PERF   of.course-FOC
tiŋmele:-ni   uli-tigi.
fell.PAST-3SG   river-LAT
Crossing it (Squirrel) of course stepped on them, it stepped on the loop and fell into the river.

T'a-ni   bugdi-le-ni,   ge,   uti   patanai
get.tied.PAST-3SG   foot-LOC-3SG   well   that   flounder
patanai,   uli-le   xaŋka-kca-i.
flounder   river-LOC   choke-INT-PRP
It got tied down with its foot, floundered, floundered, and nearly choked with water.

Uti   aŋi   waŋba-ŋi-ni   ise-si: aja-zi-de
that   IND   turtle-AL-3SG   see-IM.PRP   good-INST-FOC
xaŋka-kca-i-we-ni,   oloxi-ŋi:
choke-INT-PRP-ACC-3SG   squirrel-AL.REF
xaŋka-kca-i-we-ni.
choke-INT-PRP-ACC-3SG
Turtle took a good look at the choking Squirrel.

"Anda,   min-e-we   xaulie   weisi-gie,   ele
friend   me-0-ACC   please   rescue-REP.IMP.2SG   soon
bude-m(i) bi,   bi   xaŋka-mi."
die-1SG   me   me   choke-1SG
"Friend, please, rescue me, I am dying, I am choking."

"Aja,   ñaŋga-da   ñaŋga   aŋi-nde-ze-m(i)   sin-e-we
good   little-FOC   little IND-SEM-SUBJ-1SG   you-0-ACC
[kesu-li-nde-ze-m(i)].
torture-INC-SEM-SUBJ-1SG
"All right, let me torture you a little.

Uti   uli   do-lo-ni   ñaŋga   bi-nde   si.
that   river   inside-LOC-3SG   little be-SEM.IMP.2SG   you
Stay in the water for a while.

Si   min-e-we   ono   xeŋisi-ge-i-de."
you   me-0-ACC   how   trample-PERF-2SG-FOC
How you trampled on me!"

"Aja,   {boľše} [e-zeŋe-i]   sin-e-we   ute
good   more   NEG-FUT-1SG   you-0-ACC   that
e-zeŋe-i   nixe,   ge   aja   bi-ze-m(i),
NEG-FUT-1SG   do   well   good   be-SUBJ-1SG
ele   bude-le,   ele   xaŋka:-m(i)."
soon   die-FOC   soon   choke.PAST-1SG
"All right, I will not treat you like that {again}, well, I will be good,
I am dying, I am choking (to death)."

Waŋba   ise-si:,   ise-si:,   [oloxi]   ele
turtle   see-IM.PRP   see-IM.PRP   squirrel   soon
xaŋka-li-e-ni.
choke-INC-PAST-3SG
Turtle sees: Squirrel is going to choke.

Aŋi-ni   oloxi-ŋi-ni,   ŋene-mie   taŋda-gi-e,
IND-3SG   squirrel-AL-3SG   go-INF   let.out-REP-PP
taŋda-gi-e,   asta-gi-e-ni. ...
let.out-REP-PP   release-REP-PAST-3SG
Squirrel, (Turtle) went, took it out, took it out, and released it.

Toŋofu   asta-gi-e-ni.
loop   release-REP-PAST-3SG
It loosened the loop.

Tu: ñukto:-ni,   og'ou-gi-li.
all   get.wet.PAST-3SG   dry-REP-3SG
(Squirrel) was wet through, then dried itself.

"Ge, waŋba, a-wa   caixi aja-zi   bi-zeŋe-fi,
well turtle that-ACC   further good-INST be-FUT-1PL.IN
e-zeŋe-f(i)   ute   nixe,   aja-zi   bagdi-zeŋe-fi.
NEG-FUT-1PL.IN   that   do   good-INST   live-FUT-1PL.IN
"Well, Turtle, since this day we will be good (to each other), we will not act
like this (again), we will live well.

Si   min-ti(gi)   zima-i,   bi   sin-ti(gi)   zima-i.
you   me-LAT   visit-2SG   me   you-LAT   visit-1SG
Come and visit me, and I will come to visit you.

Si   min-e-we   ketige wa:-i,   bi   tene
you   me-0-ACC   nearly kill.PAST-2SG   me   CONT
sin-e-we   xeŋisi-mi   ketige wa:-mi.
you-0-ACC   trample-INF   nearly kill.PAST-1SG
You nearly killed me, and I nearly killed you with my trampling.

A-wa   caixi   aja-zi   xe:ti-zi   bagdi-zeŋe-fi,"
that-ACC   further   good-INST   peaceful-INST   live-FUT-1PL.IN
guŋ-ki-ni.
say-PAST-3SG
Let us live in peace and friendship from now on," it said.

Ute   bede   bagdi-li-e-ti.
that   like   live-INC-PAST-3PL
They began to live this way.

9. How they processed skin (told by Anna Sonljanovna Kančuga)

Uŋta-du.
boot-DAT
For making boots.

Nakta ña:-wa-ni   ga:-gi-e-k,   u:-li-u-(i)
boar   skin-ACC-3SG   take-REP-PAST-EXPR   scrape-INC-PAS-PRP
alukta-wa-ni,   ñoxo   alukta-wa-ni   tu:
suede-ACC-3SG   first   suede-ACC-3SG   all
u:-ge-si   pi:j-e:-k,   imo:-zi
scrape-PERF-PC.SS   sprinkle-PAST-EXPR   fat-INST

pi:,   *uli:-zi*   *degbi-si:,*   *ut'asi* *kaj-u-i.*
sprinkle.PRP water-INST   wet-IM.PRP   then   brake-PAS-PRP
Having taken a boar skin one begins to scrape the inner side of it, first having scraped the inner side of the skin they sprinkle it with fat, wet it with water, then it should be braked.

Kai: *kai:*   *kai:*   *kai:*   *kai:.*
brake.PRP brake.PRP brake.PRP   brake.PRP   brake.PRP
They brake and brake it.

Lä *kai:*   *xekul(i)*   *dexi-de.*
very brake.PRP   hot   till-FOC
They brake it very much till it gets hot.

Ut'asi xu:gi-e-ti
then   turn-PAST-3PL
Then they turn it.

kai: *{uže*   *mjagkaja}*   *aŋi-nie-nie*   *igbe-nie-nie*
brake.PRP already   soft   IND-3SG-3SG   soft-3SG-3SG
eitene,   *igbene:-n(i).*
now   soften.PAST-3SG
It is {already} soft now, it has softened.

Cosu-i   *ga:-gi-e-k,*
scraper-REF   take-REP-PAST-EXPR
cosu-le-gi-e-k,   *wagi-gi-e-k.*
scraper-V-REP-PAST-EXPR   dry-REP-PAST-EXPR
Having taken a scraper they scrape it and dry it.

Og'oma-kta-n(i)   *ña*   *kai:,*   *ña:-wa*   *ña*
dry-RES-3SG   again brake.PRP   skin-ACC   again
kai   *kai:*   *kai:*   *kai:*   *kai:.*
brake.PRP brake.PRP   brake.PRP   brake.PRP   brake.PRP
They brake the dried skin again, brake and brake it.

Igbene-ilie *igbene-ilie*   *igbene-ilie*   *ña:,* *ña:*
soften-3SG soften-3SG   soften-3SG   skin   skin
igbene-isi-ni   *läs(i)* *aja-zi*   *cosu-le-gi-e-k,*
soften-PC-3SG   very good-INST   scraper-V-REP-PAST-EXPR
gi:na-gi-e-k   *uŋta* *wo-logo-m(i).*
cut-REP-PAST-EXPR   boot make-PURP-SS
When the skin has softened, they scrape it properly and cut it out in order to make boots.

Uŋta   wo:-i,   *uŋta   wo-logo-m(i)*
boot   make-PRP   boot   make-PURP-SS
gi:na-gi-e-k.
cut-REP-PAST-EXPR
They make boots, cut out (the skin) in order to make boots.

Ut'asi   uŋta   wo:-i.
then   boot   make-PRP
Then they make boots.

Uŋta   w'o-si   metu-ge-s(i)   tene
boot   make.PERF-PC.SS   finish-PERF-PC.SS   CONT
saŋmi-u-i,   saŋmi-si-u-i.
smoke-PAS-PRP   smoke-IM-PAS-PRP
Having made boots, having finished one should smoke them.

Xo-ñieññie   ede-de-ili,   saŋmi-si-u-i.
yellow-ADJ   become-V-3SG   smoke-IM-PAS-PRP
One must smoke till they get yellow.

Saŋmi-si-m(i)   wadi-e-isi   i:ŋti-n(i)   wu:-i
smoke-IM-INF   finish-PAST-PC   heel-3SG   make.PAS-PRP
kiugi:.
smooth.PRP
After they finish smoking, they make the heel smooth.

K'olo-du   wo:-ili   xai   ute   bede.
mitten-DAT   make-3SG   too   that   like
They make mittens like this too.
Käŋa   ña:-wa-ni   u:-i,   {mezdra-wa-ni}
deer   skin-ACC-3SG   scrape-PRP   suede-ACC-3SG
aŋi   alukta-wa-ni   u:-o:.
IND   suede-ACC-3SG   scrape-PP
They scrape a deer skin, they scrape suede.

Ut'asi   düi-zi   ula-si:,   ula-si-mie   cosu-le-i.
then   brain-INST   wet-IM.PRP   wet-IM-INF   scaper-V-PRP
Then they wet it with brain and scrape.

Ula-si-mi   cosu-le-i,   cosu-le-i,   cosu-le-i.
wet-IM-INF   scraper-V-PRP   scraper-V-PRP   scraper-V-PRP
They wet and scrape, scrape.

Lä   *ula-si:-ni,*   *limbi-limbi*   *ed'e.*
very   wet-IM-3SG   soaked-soaked   become.PERF
They wet very much (till the skin) gets soaked.

Go: *go:* *aŋi*   *ñuktui* *ñuktui* *limbi-limbi-de*
long long IND   wet   wet   soaked-soaked-FOC
tu: *cosu-le-i,*   *tu:*   *cosu-le:,*   *cosu-le:.*
all   scraper-V-PRP   all   scraper-V.PP   scraper-V.PP
They scrape, scrape for a long time till it gets wet through, gets soaked, they
scrape and scrape.

Uli   *uta tene* *wagi-si-gi:,*   *wagi-si-gi:,*
water   that CONT dry-IM-REP.PRP   dry-IM-REP.PRP
cosu-le-i,   *cosu-le-i,*   *u-gi:-li*   *wagi-e.*
scraper-V.PRP scraper-V.PRP   dry-REP-3SG   dry-PRP
Having dried water they scrape again, dry again, dry again, scrape, scrape,
scraping they dry it.

Adi-me   *{minut}* ... *aŋi* *tuŋa* *{minute}*
how.many-ACC   minute   IND five   minute
wagi-sie,   *ña*   *ga:-gi-e,*   *ña*   *cosu-le-i,*
dry-IM.PRP   again   take-REP-PRP again scraper-V-PRP
cosu-le-i,   *neptem-de*   *cosu-le-i.*
scraper-V-PRP flat-FOC   scraper-V-PRP
They dry (the skin) for five {minutes}, then they take (the skin) again (and)
scrape, scrape, till it gets flat.

Ut'asi   *ña*   *wagi-gi:,*   *xegiele soktu-gi:.*
then   again   dry-REP.PRP down spread-REP.PRP
After that they dry it again, spread it on the floor.
Wagi-si:,   *wagi-si:,*   *wagi-si:,*   *ña*   *cosu-le-i.* ...
dry-IM.PRP dry-PRP   dry-PRP   again scraper-V-PRP
They dry it, dry, dry, and scrape again.

{Sovsem}   *og'ou-de tu:* *cosu-le-i*   *cosu-le-i.*
completely   dry-FOC all   scraper-V-PRP   scraper-V-PRP
They scrape it {when it is completely} dry.

{Sovsem}   *og'ou-de cosu-le:-k,*   *wagi-si-e-k,*
completely   dry-FOC scraper-V.PAST-EXPR   dry-IM-PAST-EXPR
kede-z(i)   *lä*   *kede-i*   *kede-zi.*
dressing.tool-INST very dress-PRP   dressing.tool-INST
They scrape it {when it is completely} dry; having dried it they dress it heavily
with a dressing tool.

Kede-zi   *kede-i*   *kede-i.*
dressing.tool-INST   dress-PRP   dress-PRP
They dress it, dress with a dressing tool.

Ut'asi gdeli   *ŋala*   *k'olo*   *wu:-i*   *ja-za*   *ebede*
then   CONT   hand   mitten   make.PAS-PRP   of.course   so
ele   *sexi*   *bede*   *ede:-de*   *ei-de.*
soon   cloth   like   become.PP-FOC   this-FOC
After that they make the mittens; (the skin) now becomes (soft) like cloth.

K'olo   *gi:ne:-k,*   *gi:ne:-k,*   *uta k'olo*
mitten   cut.PAST-EXPR   cut.PAST-EXPR   that   mitten
wo:-k,   *k'olo-ŋisi:,*   *watuza*   *wo:-i.*
make.PAST-EXPR   mitten-V.PRP   home.shoe   make-PRP
They cut out the mittens, cut, sew the mittens, make the mittens, (or) make
home shoes.

Saŋmiŋku-le   *saŋmi-si:*   *xo-ñieñie-de*
smoke-LOC   smoke-IM.PRP   yellow-ADJ-FOC
They smoke them over the smoke, (so that they get) yellow.

10. *Xaŋaŋku teluŋu* 'Story about the shaman's guessing' (told by Evdokija
Ivanovna Kančuga)

[Omo a:nta]   *zima:-n(i)*   *sikie.*
one   woman   visit.PAST-3SG   evening
One woman went on a visit in the evening.

Zima: *eme-gie ...*
visit.PAST   come-REP.PRP
After visiting she came home.

Timadule   *te:-gi-le-m(i)*   *j'eu-ke le*   *galakta-la:-m(i),*
morning   get.up-REP-SEM-INF   what-IND   seek-PURP-SS.REP
nientile-m(i)   *uti*   *nekce-i*   *aŋi-wa*   *konz'o-ziga-i*
open-INF   that   chest-REF   IND-ACC   chest-DIM-REF
ic'ei-ziga-i-de.
small-DIM-FOC-FOC
In the morning she got up
and began to seek something, she opened her chest, small chest.

Niente-lisi-n(i) j'eu-de   anči,   waiga-n(i)-de   anči,
open-CC-3SG   what-IND   no   earring-3SG-FOC   no
belepti-n(i)-de   anči,   ñö:-mo   au-n(i)-de   anči,
bracelet-3SG-FOC   no   sable-ADJ   cap-3SG-FOC   no
keŋku-keŋku   esi-gi-e-ni   uti   aŋi-ni
empty-empty   become-REP-PAST-3SG   that   IND-3SG
nekce-ŋku-ni. ...
chest-N-3SG
When she opened it there was nothing, no earrings, no bracelets, no sable cap,
the chest had become empty.

Ge,   uta-wa   "Xaŋasi-je   min-e-we   xaulie-de.
well   that-ACC   guess-IMP.2SG   me-0-ACC   please-FOC
Well, then (she came to the shaman and said) "Guess (who has stolen it) please.

<B'a-gi-si-ni>   b'a-gi   edeisini   sin-e-we
find-REP-PC-3SG   find-REP.PRP   if   you-0-ACC
agda-gi-te-m(i)-ze."
thank-REP-PERM-1SG-HORT
Whether you find it or not I'll thank you."

Sama   dian-a-i   "Bi   mute-ze-m(i)   uta-wa?"
shaman   say-0-PRP   me   can-SUBJ-1SG   that-ACC
The shaman said: "Will I be able to?"

"Aja   mute-zeŋe-i."
good   can-FUT-2SG
"Please, you will be able."

"Ge,   ilekpe-si-ze-f(i)."
well   try-IM-SUBJ-1PL.IN
"Well, let us try."

Ilekpe-sie   uti   xaŋa-ŋku-zi.
try-IM.PRP   that   guess-N-INST
He tried with the guessing tool.

Ge,   xaŋa-ŋku   zolo-ŋi: ga:-gie,   aŋi   toli
well   guess-N   stone-AL.REF   take-PRP   IND   copper.disc
teti-gie.
dress-REP.PRP
Well, he took the guessing tool, the stone, he put on the copper disc.

"Ge, xaŋa-ze-f(i).
well   guess-SUBJ-1PL.IN
"Well, let us guess.

Ge,	*uti*	*dian-a-i,*		*ge,*	*omo*	*ni:*	*bie,*
well	that	say-0-3SG		well	one	man	be.PRES.HAB
uti	*nixe*	*bi-lisi-nie*		*ono*	*nixe-zeŋe-i?*		
that	do	be-CC-3SG		how	do-FUT-1SG		

Well, he said, there is one man, what shall I do if it was he (who has stolen it)?

Ono-do	*e-zeŋe-i*		*ute*	*b'a-gie*	*edeisini."*
how-FOC	NEG-FUT-1SG		that	find-REP.PRP	if

I'll do nothing (to him) if (the things) are found."

Ge,	*uti ni: dian-a-i,*		*ŋene:-k,*		*dian-a-ini*
well	that man		say-0-PRP		go.PAST-EXPR say-0-3SG
"Ge,	*si*	*ei*	*dogbo-ni*	*bi*	*aŋi-we-i*
well	you	this	night-3SG	me	IND-ACC-1SG
bi	*duŋsi:*	*zomi-ne-se:-i?*			
me	thing.1SG	steal-DIR-EXP.PAST-2SG			

Well, she went and said to this man, she said: "Well, did you come to steal my things last night?

Si	*aja-zi*		*ceze*	*dian-a-isi-ni*		*si*	*ceze*
you	good-INST		truth	say-0-PC-3SG		you	truth
dian-a	*ceze*		*dian-a*		*ceze*	*dian-a-i*	*edeisini*
say-0	truth		say-0		truth	say-0 –2SG	if

zä:	*bu-te-m(i)-ze*			*bi,*	*tu:*	*bu-ge-si*
money	give-PERM-1SG-HORT			me	all	give-PERF-PC.SS
j'e-we	*zawa-m(i)*	*j'e-we-de,*			*min-(du)*	
what-ACC	take-INF	what-ACC-IND			me-DAT	
tu:	*bu-gi-e.*					
all	give-REP-IMP.2SG					

If you tell the truth I'll give you money, if you return everything you took, give me back everything.

J'eu	*ni:-d(e)*		*e-zeŋe-i*		*dian-a."*
what	man-FOC		NEG-FUT-1SG		say-0 that-ACC

I'll tell nobody."

Uta-wa ni: dian-a-i		*"Bi-de*		*e-si-m(i)*		*zawa."*
man say-0-PRP		me-FOC		NEG-PAST-1SG		take

The man said: "I did not take it."

"*Si   zawa-i.*
you   take-2SG
"You have taken it.

Bi   t'osi-e-m(i).   *{Ona   vret}.*
me   dream-PAST-1SG   she   lies
I dreamt it. {She is lying.}

T'osi-e-m(i)   *{govorit},*   *t'osi-e-m(i).*
dream-PAST-1SG   says   dream-PAST-1SG
I dreamt it {she said}, I dreamt it.

Ge,   dian-a-i,   *aja-zi*   *dian-a-i.*
well   say-0-IMP.2SG   good-INST   say-0-IMP.2SG
Please, tell well.

Aja   e-zi-de   *xagza ...*
good   NEG-IMP.2SG-FOC   be.shy
Do not be shy.

Si   e-lisi: *bu-gi,*   *sama-ti(g)i*   *aɲi-zeɲe-i*
you   NEG-CC.2SG   give-REP   shaman-LAT   IND-FUT-1SG
xaŋa-ŋku-ti(g)i   *sama*   *gele-zeɲe-i.*
guess-N-LAT   shaman   ask-FUT-1SG
If you don't return it, I will ask the shaman to guess.

Sin-du   ge: bi-ze   *e-si:*   *bu-gi.*
you-DAT   bad be-SUBJ   NEG-PC.2SG   give-REP
You'll be ill unless you give it back.

Ge,   dian-a-i   *uti,*   *xaulie, dian-a-i,*   *xaulie*
well   say-0-PRP   that   please say-0-PRP   please
bu-gi-e   *si,*   *bi*   *ni-tigi-de*
give-REP-IMP.2SG   you   me   who-LAT-IND
ali   dian-a-i."
when   say-0-1SG
She said, please please, give it back, I'll tell nobody."

Ono   nixe-ze-m(i)?
how   do-SUBJ-1SG
What should she do?

Ceze   zawa:-n(i).
truth   take.PAST-3SG
He has indeed taken it.

Ge,   ceze   zawa:-n(i)   "Bi   e-si-m(i)   zawa"
well   truth   take.PAST-3SG   me   NEG-PAST-1SG   take

zawa-m(i)   gune   "E-si-mi   zawa"   gun-e-ini.
take-INF   EV   NEG-PAST-1SG   take   say-0-3SG
Having taken it he still keeps saying: "I did not take it."

Xai   "E-si-m(i)   zawa.
still   NEG-PAST-1SG   take
(He keeps saying:) "I did not take it.

E-si-m(i)   zawa.
NEG-PAST-1SG   take
I did not take it.

Bi   e-si-m(i)   nixe,   e-si-m(i)   zomi
me   NEG-PAST-1SG   do   NEG-PAST-1SG   steal

uta-wa.".
that-ACC
I did not do it, did not steal it."

{Nu}   uti   tene   a:nta   dian-a-i   "{Nu}...   bi,
INTER   that   CONT   woman   say-0-PRP   INTER   me

bi   ono   nixe?
me   how   do
The woman said: "Well, what shall I do?

"Si   ge:"   e-zi   gun-e,   <e-zi>   min-tigi
you   bad   NEG-IMP.2SG   say-0   NEG-IMP.2SG   me-LAT

e-zi   ge: muisi.
NEG-IMP.2SG   bad   think
Do not blame me.

Zawa-m(i)   men-e   zawa:-i   e-ini-de
take-INF   REF-0   take.PAST-2SG,   NEG-3SG

bu-gi:.
give-REP.3SG
You have taken it and do not return it.

Sin-tigi   *ge:*   *bi-zeŋe-ni."*
you-LAT   bad   be-FUT-3SG
"You'll be ill."

Ge,   *omo*   *aŋa-ni-de*   *omo*   *aŋa*   *e-si-ni*
well   one   year-3SG-FOC   one   year   NEG-PAST-3SG
bie   *uti*   *nixe-ze-mie*   *bolo*   *bolo-gi:,*
be.PRES.HAB   that   do-SUBJ-INF   autumn   autumn-REP.PRP
bude:-ni.
die.PAST-3SG
Less than a year later so it was, he died when the autumn came.

11. *Z'oto g'ai-de* 'Otter and Crow' (told by Alexandr Egorovič Pionka)

Z'oto   *aŋi*   *bi-mie,*   *omo*   *z'oto*   *bi-si-ni,*   *z'oto*   *g'ai.*
otter   IND   be-INF   one   otter   be-PAST-3SG   otter   crow
There once lived an Otter and a Crow.

Z'oto   *tu:*   *xuli:*   *xuli:,*   *diga-la-m(i)*   *tu:*   *wa:-i.*
otter   all   go.PRP   go.PRP   eat-PURP-SS   all   kill-PRP
Otter always goes (hunting), hunts all the time so that it could eat.

Zeuŋe-we:-s   *zeuŋe*   *wa:-ini,*   *sugzä:-wa*
greenling-ACC-DIS   greenling   kill-3SG   fish-ACC
galakta-ini   *diga-la:-m(i).*
seek-3SG   eat-PURP-SS
It kills greenlings (a variety of salmon), seeks for fish to eat.
Bi-mie   *z'oto*   *ei*   *neŋi-ni*   *omo*   *neŋi-ni*
be-INF   otter   this   day-3SG   one   day-3SG
muisi: *"Anda,*   *aŋi*   *g'ai-ma*   *anda-tigi*
think.3SG   friend   IND   crow-ADJ   friend-LAT
ŋene-ze-m(i) bi."
go-SUBJ-1SG me
So they lived, one day Otter thinks: "Let me go to my friend Crow."

G'ai-ma   *anda-n(i)*   *z'oto*   *bi-xi-ni,*   *e,*
crow-ADJ friend-3SG   otter   be-PAST-3SG   INTER
g'ai-ma   *anda-ni*   *eme:-ni.*
crow-ADJ   friend-3SG   come.PAST-3SG
Otter was Crow's friend, it came to its friend Crow.

"Ge, g'ai anda, i:-digi em'e-i?
well crow friend where-LAT come.PERF-2SG
"Hey, friend Crow, where are you coming from?

Alasi-e diga-la-f(i) olokto-zo-m(i) bi
wait-IMP.2SG eat-PURP-1PL.IN cook-SUBJ-1SG me
si diga-laga-i."
you eat-PURP-2SG
Wait, I'll cook for you to eat in order that you eat."

Kawa do-lo-ni joxo-i toxolo-gi-e z'oto.
tent inside-LOC-3SG pot-REF put.on.fire-REP-PP otter
In the house the Otter put the pot on the fire.

Joxo-i toxolo:.
pot-REF put.on.fire.PP
It put the pot on the fire.

Joxo-ni xui:, xui-li-e-ni, joxo cul(i)
pot-3SG boil.PRP boil-INC-PAST-3SG pot through
xuiŋ-ke gunei z'oto.
dive-PAST EV otter
The pot is boiling, began to boil, Otter dived right down.

Joxo culi xuiŋ-ki-zi go: bi: go: go:-do
pot through dive-PP-INST.REF long be.PRP long long-FOC
ei bie ba:-za ge:-tigi omo uge
NEG be.PRES.HAB place-N surface-LAT one bunch

tei zeuŋe gazi-e-ni, omo uge tei.
whole greenling bring-PAST-3SG one bunch whole
Having dived it very soon brought out a bunch of greenlings, a whole bunch.

Uta tuge-zi olokto:-ni, g'ai diga-ili.
that quick-INST cook.PAST-3SG crow eat-3SG
It cooked quickly, and Crow ate.

G'ai diga-m(i) metu-ili, bi-mie g'ai ŋene-ilie-ze
crow eat-INF finish-3SG be-INF crow go-3SG-FOC
dogbo-gi-u.
night-REP-PAS
Crow finished eating, so they lived, one evening Crow comes to Otter.

"G(e),   *anda,*   *bi-de*   *ele*   *ŋeni-m(i)*
hey   friend   me-FOC   enough   come-INF
agda:-mi   *si*   *zeuŋe-we*   *j'e-we*
be.glad.PAST-1SG   you   greenling-ACC   what-ACC
diga-waŋ-ki-me-i.
eat-CAUS-PP-ACC-2SG
"Hey, friend, I was walking (to you) too, I am glad that you fed me with greenling or anything else.

Si-de   *eme-i*   *min-tigi.*
you-too   come-IMP.2SG   me-LAT
Come to me too.

Timana   *gdali*   *timana*   *ca:-la-n(i)-da*
tomorrow   CONT   tomorrow   after-LOC-3SG-FOC
eme-te-i-ze."
come-PERM-2SG-HORT
Come the day after tomorrow."

E,   *z'oto*   *bi:*   *bi:.*
INTER   otter   be.PRP   be.PRP
Otter lived, lived.

"Ei   *bi*   *anda-i*   *diaŋ-ka*   *"nuan-tigi-ni*   *eme-i*
this   me   friend-1SG   say-PERF   he-LAT-3SG   come-IMP.2SG
gum(u)"   *g'ai.*   *ŋeni-ze-m(i)*   *bi,*   *j'e-we-de*
EV   crow   go-SUBJ-1SG   me   what-ACC-IND

egdi-we   *diga-waŋ-za"*   *gum(u).*
many-ACC   eat-CAUS-SUBJ   EV
"My friend Crow said I should come to her, I should go, she will feed me with many things," it said.

G'ai-tigi   *ŋene-ili,*   *"A,*   *anda,*   *eme:-i,*
crow-LAT   go-3SG   INTER   friend   come.PAST-2SG
j'ewe   *gabak,*   *j'e-we*   *nixe-je,*   *gabak.*
INTER   INTER   what-ACC   make-2SG   INTER
It came to Crow, "Friend, you came, croak, how are you, croak."

Eme-mie   *joxo-i*   *toxolo-gi-e-n(i)*   *g'ai*   *xaisi.*
come-INF   pot-REF   put.on.fire-REP-PAST-3SG   crow   too
When it came, Crow put the kettle on the fire, too.

Joxo-i	*toxolo-gi-zi:*		*xui-li-zi-ge,*		*z'oto*
pot-REF	put.on.fire-REP.PP-INST		boil-INC.PP-INST-FOC		otter

bagä:-za-la	*te:-i.*
opposite-N-LOC	sit-PRP

The kettle began to boil on the fire, the Otter sits opposite.

Joxo	*culi*	*xuiŋ-ku-nie*		*g'ai.*
pot	through	dive-PAST-3SG		crow

Crow dived into the kettle.

Alasi:,	*ei*	*eme-gi,*	*alasi:,*	*ei*	*eme-gi,*
wait.PRP	NEG	come-REP	wait.PRP	NEG	come-REP

alasi:,	*ei*	*eme-gi.*
wait.PRP	NEG	come-REP

(Otter) waits, it is not coming, (Otter) waits, it is not coming.

"J'eu	*ŋene-i?"*
what	go-PRP

"Why did she leave?"

Ba:-la	*ise-kte-ne,*	*ba:-la-da*		*anči,*
place-LOC	see-DIST-DIR	place-LOC-FOC		no

i:-le-de		*anči,*	*joxo*	*düjxi-ni*	*olokto-i.*
what-LOC-IND		no	pot	inside-3SG	cook-PRP

It went to look outdoors, nobody there, (Crow) is nowhere (to be found), it is being cooked in the pot.

Joxo	*do-lo-ni*		*ise-si-gi-ni,*		*ei*
pot	inside-LOC-3SG		see-IM-REP-3SG		this

saña		*dugelilie*	*xui:-ni*		*gune*	*joxo*
bird.excrement		turbid	boil-3SG		EV	pot

do-lo-ni.
inside-LOC-3SG

(Otter) looked into the pot (and sees): the water had become turbid with bird excrement boiling in the pot.

Ali	*bude:-ni,*		*{vse}?*
when	die.PAST-3SG		all

When did it die {and it was the end}?

E-si-n(i)		*mute*	*uli-tigi*	*ŋene-kce-m(i).*
NEG-PAST-3SG		can	water-LAT	put-INT-INF

It could not go into the water.

Ele   tete:-ni.
enough   end-SG
This is the end.

12. *Waŋba* 'Turtle' (told by Andrej Dzandzuleevič Suanka)

Waŋba   ejekte   uli-le   e-ini   bagdi, waŋba
turtle   fast   water-LOC   NEG-3SG   live   turtle
bagdi-mi   to:go   uli-le.
live-INF   quiet   water-LOC
Turtles do not live in fast water, they live in quiet water.

To:go uli-le   bagdi-mi,   ni:-we   ise-i
quiet water-LOC   live-INF   man-ACC   see-PRP
susa:-n(i)-tene,   xuine-ini   uli   düixi-ni.
escape-3SG-CONT   dive-3SG   water   inside-3SG
They live in quiet water, and when they see a man they escape, they dive into
the water.

Xuine-si-e-ti,   e-zeŋe   b'a-gi.
dive-IM-PAST NEG-FUT   find-REP
If they dive, they will not be found.

Waŋba   umakta-ni   egdi.
turtle   egg-3SG   many
Turtle has a lot of eggs.

Umakta-ini   egdi-we,   egde-ŋki,   egde-ŋki   umakta-ini,
egg-3SG   many-ACC   many-ADV   many-ADV   egg-3SG
läsi   egdi-me.
very   many-ACC
It lays many eggs, lays a lot of them.

Za: tuŋa-ma-wa   umakta-ini.
ten   five-ACC-ACC   egg-3SG
It lays fifteen eggs.

Uta   oňokto-wo   ule-isi   [oňokto]   umakta-ini.
that   sand-ACC   dig-PC?   sand   egg-3SG
It digs the sand and lays there its eggs.

Umakta-isi:-tene		*umakta-m(i)*	*metu-ge,*	*uta-wa*	*teu*
egg-PC-CONT		egg-INF	finish-PERF	that-ACC	all

deigi:-ni,	*teu*	*deigie.*
cover-3SG	all	cover.PRP

Having finished laying eggs it covers them all (with sand).

Uti	*su:-tigi*		*men-e*	*xekui*	*edisini*	*men-e*	*bagdi:-ni.*
that	sun-LAT		REF-0	warm	when	REF-0	live-3SG

They grow by themselves in the sun when it is warm.

Aŋi	*sita,*	*waŋba*	*sita-ni*		*ic'a-i-de,*
IND	child	turtle	child-3SG		small-FOC-FOC

ic'a-i-de,	*ic'a-i-de.*
small-FOC	small-FOC-FOC

Baby turtles are very very small.

Uta	*beje-ti*		*men-e*	*ñugie*		*su:-tigi*
that	self-3PL		REF-0	come.out.PRP		sun-LAT

solo-xi:,		*uli-tigi*		*egbe-xi:,*	*ute*	*bede*	*sagdi*
go.upstream-IM.PRP		water-LAT		swim-IM.PRP	that	like	big

ede-ini.
become-3SG

They come out to the sun by themselves, (go) up the stream, swim to the river, this way they grow up.

13. Making a fire (told by Susan Čufuevič Geonka)

Bu:-we	*galakte-iti*		*bita-la,*	*aja*	*aja*	*bu:-we.*
flint-ACC	seek-3SG		spit-LOC	good	good	flint-ACC

They seek a flint in the spit, a very good flint.

Sagdi	*bu:-we*		*b'a*	*ut'as(i)*	*zolo-zi*		*zolo-zi*
big	flint-ACC		find	then	stone-INST		stone-INST

kakta-sie,		*nekce-iti.*
split-IM.PRP		keep-3PL

When they find a big flint, they split it with the stones and keep it.

Uti	*zolo-zi*		*tene,*	*uti*	*bu:-zi*		*[wo:kto]*
that	stone-INST		CONT	that	flint-INST		grass

wo:kto	*bi:*		*siŋa-gdeli,*		*wo:kto*	*gegbi,*		*siŋa-gdeli....*
grass	be.PRP		mouse-FOC		grass	name.PRP		mouse-FOC

And with this stone, this flint (they kindle) grass called "mouse grass".

Uta-wa   ŋala-zi: teu   čifala:-k,
that-ACC   hand-INST   all   brake.PAST-EXPR
čifala:n-zi-ni   teu   aŋi-   bede   bi:-ni.
brake.PP-INST-3SG   all   IND-   like   be-3SG
They brake it by hand, when it is broken, it looks like this.

[To:] to:-wo   ile-iti   nixe:n-zi.
fire   fire-ACC   kindle-3PL   make.PP-INST
After that, they make fire.

Uti   wo:kto d'a   bede, da: bede   lemde lemde,.
this   grass   cotton.wool   like   cotton.wool   like   fluffy fluffy
uta-zi   uta   pu:si-mi: to: ile-iti.
that-3SG   that   blow-INF   fire   kindle-3PL
This grass is like cotton-wool, very fluffy; then they make fire blowing on it.

Pusa: {kak   spička ne   gorit   prosto}.
sort.of.grass   like   match not   burns   simply.
This grass {does not burn just like a match}.

Uti   nixe-gdeli   d'a-ŋi-ni   zegde-lisi-n(i)-de
that   do-FOC   cotton.wool-AL-3SG   burn-CC-3SG-FOC
pu:si-mi pu:si-mi   zegde-li:-ni.
blow-INF blow-SS   burn-INC-3SG
After that, they burn the cotton wool, they blow, blow, and burn (it).

Zegde-lisi-ni   uta-la   taluga-zi   [taluga
burn-CC-3SG   that-LOC   birch.bark-INST   birch.bark
guza-lie] {ili} mo:-wo   [mo:-wo   mo:-wo]   og'ou
tear-3SG   or   tree-ACC   tree-ACC   wood-ACC   dry
mo:, sakta   kua-inie,   kua-kta   kä:-li
wood brush.willow   shave-3SG   shaving-N   near-PROL
nede-i,   pu:si-mi   zegde-li:-ni.
put-PRP   blow-INF   burn-INC-3SG
When it starts burning, they tear off (a piece of) birch bark or put some wood,
dry wood, {or} shave a brush willow and put the shavings nearby and it starts
burning, while they are blowing.

To: ile-iti   uta-zi.
fire   kindle.PAST-3PL   that-INST
They kindled fire with this.

Bi   *uta-wa*   *ise-si-e-mi.*
me   that-ACC   see-IM-PAST-1SG
I have seen this.

{Ja   *videl}* *uta-wa.*
me   saw   that-ACC
{I have seen} this.

14. Old man Kanda and hares (told by Susan Čufuevič Geonka)

Zu: *mafas'a* *bagdi-e-ti,*   *omo*   *baja,*   *omo*   *zoŋku-s'e.*
two   old.man live-PAST-3PL   one   rich   one   poor-N
There were two old men, one was rich, the other was poor.

Bagdi-mie   *bagdi-mie,*   *uti*   *mafas'a,*   *zoŋku* *mafas'a*
live-INF   live-INF   that   old.man   poor   old.man
dian-a-ini   *"[Bi]*   *aŋi-we*   *sina-si-je*
say-0-3SG   me   IND-ACC   burden.frame-V-IMP.2SG
sina-wa."
burden.frame-ACC
They lived, lived, the old man, the poor old man says (to his wife): "Pack my burden frame."

Xaikte-we   *jeu-gde-we*   *s'ou-we*   *sina-da-li.*
dry.grass-ACC what-FOC-ACC   scoop-ACC   burden.frame-V-3SG
She packed dry grass, a scoop, everything.

"Uli   *kä:-la-ni*   *kepte-ne-ze-m(i),*   *tukca* *min-a-wa*
river   near-LOC-3SG lie-DIR-SUBJ-1SG   hare   me-0-ACC
b'a-laga-li"....
find-PURP-3SG
"I will go and lie down near the river, so that the hares find me."

Mamaka-ŋi:-gdeli   *"Si*   *tene*   *kawa-la*   *tu:*   *saŋa*
wife-AL.REF-FOC   you   CONT bark.house-LOC   all   hole
likpisi-je, *uke-we*   *xuku-je,*   *ilakä-wa*   *kulegi-je.*
plug-IMP door-ACC   tie-IMP.2SG   bast-ACC   prepare-IMP.2SG
(He said) to his wife: "Plug up all the holes in the house, close the door, and prepare the bast.

Tukca min-a-wa   *b'a-gi:-si:-ni*   *tu:*   *wokti-we,*   *saŋa*
hare me-0-ACC   find-REP-PC-3SG   all   door-ACC   hole

tu: *likpigi-je,*   *to:*   *xo:-lo-ni*   *likpigi-je.*
all   plug-IMP.2SG   fire   over-LOC-3SG plug-IMP.2SG
When the hares find me, plug everything, the door, all the holes, plug (the flue)
over the fire.

Uta   *bi:*   *e-lege-ni*   *tukca* *xo:n-tigi-ni*
that   be.PRP NEG-PURP-3SG   hare   outside-LAT-3SG
ŋene."
go
(Do) so, so that the hares cannot escape outdoors."

Ute-   *bede*   *ŋene-gi-e-k,*   *ŋene:-ni*   *uli*
that   like   go-REP.PAST-EXPR go.PAST-3SG river
kä:-tigi-ni.
near-LAT- 3SG
So he left, he went to the river.

Uli   *ŋä:-la-n(i)*   *kepte:-k,*   *kepte:-i,*   *kepte:-i.*
river bank-LOC-3SG lie.PAST-EXPR   lie-PRP   lie-PRP
He lay down on the river bank, he was lying for a long time.

Gagaga   *ele:*   *sikie-gie ...*   *omo*   *tukca*
INTER   soon   evening-REP.PRP   one   hare
eme:n-zi: *kä-li.*
come-PP-INST.SS near-PROL
In the evening one hare came up.

"*Od'o,*   *Kanda* *od'o*   *i:mi* *i:mi* *bude:-nie,*
grandfather Kanda grandfather   why   why   die.PAST-3SG
haigugugu?
INTER
"Why did grandfather Kanda die?

Xaikta-ni-de   *bie*   *haigugugu,*   *to:-n(i)-de*
dry.grass-3SG-FOC   bePRES.HAB INTER   fire-3SG-FOC
bie   *haigugugu,*   *s'ou-n(i)-de*   *bie,*
be.PRES.HAB INTER   scoop-3SG-FOC   be.PRES.HAB
haigugugu, *i:mi*   *bude-nie?*
INTER   why   die.PAST-3SG
There is dry grass for putting in the boots, the fire, the scoop, why did he die?

Ai-ŋ'ei   *tukca-nie,* *haigugugu,*   *eme-je-ue*   *haigugugu,*
fir.tree-N hare-3SG   INTER   come-IMP-2PL   INTER

sakt'ai   *tukca-nie,*   *die-le*   *tukca-nie,*
willow.thicket   hare-3SG   far.from.river-N   hare-3SG
haigugugu,   *eme-je-ue*   *haigugugu,*   *od'o*
INTER   come-IMP-2PL   INTER   grandfather
bude:-me-nie   *haigugugu*   *kawa-tigi*   *neu-gi-lege*
die.PP-ACC-3SG   INTER   tent-LAT   fetch-REP-PURP
haigugugu."
INTER
Hares from the fir tree thicket, come here, hares from the brush willow thicket, hares from faraway places, come here, in order to fetch the dead grandfather back to his house."

Ute.
that
(He sang) like that.

Tukca   *eme-kte:-ni.*
hare   come-DIS.PAST-3SG
The hares came from different places.

"E:,   *uta bi:-te."*
INTER   that bi.PRP-FOC
"Ah, things are like this."

Tu: *eme-kte:-ti.*
all   come-DIS.PAST-3PL
All of them came.

[Mafa]   *uti*   *od'o*   *mogolie*   *mogolie*
old.man   that   grandfather   around   around
mogolie   *jeukte-si:*   *"Ge,*   *bude:-mi*
around   check-IM.PRP   yes   die.PAST-INF

neu-gi-ze-f(i)   *kawa-tigi,*   *mama-tigi*
fetch-REP-SUBJ-1PL.IN   tent-LAT   wife-LAT
neu-gi-ze-fie."
fetch-REP-SUBJ-1PL.IN
They checked the old man all over, "Yes (indeed), he has died, let us bring him back to his house, to his wife."

Neu-gi-li-e-ti,   *neu-gi-e-k*   *mafasa-wa,*
fetch-REP-INC.PAST-3PL f   fetch-REP-PAST-EXPR   old.man-ACC
neu-gi: *zug-tigi,*   *kawa-tigi,*   *neu-gi-e:,*   *mede:*
fetch-REP.PRP   house-LAT   tent-LAT   fetch-REP.PRP   report

"Ei   od'o   uli   kä:-la-ni   gekti-e-me-ni
this   grandfather   river   near-LOC-3SG   freeze-PP-ACC-3SG
neu-gi-e-u."
fetch-REP-PAST-1PL.EX
They started fetching, brought the old man back to his house, and reported:
"Here, we have brought back the grandfather frozen, from near the river."

"Aja,   agda,   aja",   agda:-nie   uti   mamaka   tukca
good   be.glad good   thank PAST-3SG   that   old.woman   hare
neu-gi-e-me-ni.
fetch-REP-PP-ACC-3SG
"Good, thank you," – the old woman thanked the hares which had brought (the
old man).

Uti   agda:-nie,   agda:-nie,   wokti   tu: xekegi-si-e-k.
that   thank-3SG   thank-3SG   door   all   tie-IM.PAST-EXPR
She thanked them and meanwhile closed the door.

Mafasa-ni   xere   xere   te:-gi-mie   oloŋki-zi
old.man-3SG quick   quick   get.up-REP-INF   stick-INST
ŋene-wasi-e-ni   j'eu-zi   j'eu   oloŋki bi-mie   jeu,
beat-DIV-PAST-3SG   what-INST   what   stick   be-INF   what
tamu-zi.
stick-INST
The old man got up quickly and beat (them) with a stick and with everything.

Tu: koŋko-si:-li,   koŋko-do-i,   tamu-zi   koŋko-do-li
all   beat-IM-3SG   beat-SEM-PRP stick-INST   beat-SEM-INC
omo   aŋi-we   tukca-wa   ku'ai-la-ni   p'ali-gde
one   IND-ACC   hare-ACC   ear-LOC-3SG   black-FOC
zegde-li   tamu-zi.
burn-3SG   stick-INST
He beat them and hit one hare's ears with a charred burnt stick.
{A}   tamu   paktana tamu-de   [jala] jala   zawa   uti   tamu
and   stick hit   stick-FOC   coal   coal ... take   that   stick
j'eu-gde-zi ...   ku'ai-ni   p'ali-gde.
what-FOC-INST   ear-3SG   black-FOC
And the stick with which he hit the hare was burnt, like coal.

Utemi [ku'ai] tukca ku'ai-ni   p'aligi bi:,   p'aligi,
then   ear   hare   ear-3SG   black be.PRP   black
ku'ai due-ni   p'aligi.
ear   end-3SG   black
That is why the hares' ears are black, the ends of the hares' ears are black.

Kanda   mafa   p'aligi tamu-zi   cinge-da:-ni,
Kanda   old.man   black   stick-INSTR   hit-V.PAST-3SG
to: tamu-zi-ni. ...
fire   stick-INSTR-3SG
The old man Kanda hit it with the black stick from the fire.

Uta-wa   tukca-ŋi: tu: si:-si:,   tu: zeute-ŋisi:.
that-ACC   hare-AL.REF   all   skin-IM.PRP   all   food-V.PRP
They skinned their hares, cooked a lot of different food.

Baja   mafa-wa   gele:-ti   sauli-masi   baja
rich   old.man-ACC   invite.PAST-3PL   have.feast-REC   rich
mafa-wa   sauli-masi-le-fi   gele:-ni ...
old.man-ACC   have.feast-REC-PURP-SS.PL   invite.PAST-3SG
He invited the rich man to have a feast together.

Uti dian-a-ini,   "Ei   zoŋku   zoŋku   mafas'a   j'eu   j'e-we
that say-0-3SG this   poor   poor   man   what   what-ACC
wa:-li   sauli-le-m(i)   gele-ini   minti-we?"
kill.PAST-3SG have.feast-PURP-INF   invite-3SG   we.IN-ACC
He says, "What did the poor man kill to invite us for a feast?"

"A:,   tukca   wa:-ni   [sin-e-we]   tukca
INTER   hare   kill.PAST-3SG you-ACC   hare
wa:-ni,   sauli-le-m(i)   geli-ŋie"   aŋi
kill.PAST-3SG have.feast-PURP-SS   invite-IC   IND
mamaka-ŋi-ni   dian-a-ini.
old.woman-AL-3SG   say-0-3SG
"He killed hares to invite you for a treat," says his wife.

"Ge,   ŋene-ze-f(i)",   ŋene:-ti.
INTER   go-SUBJ-1PL.IN   go.PAST-3PL
"Well, let us go," and they went.

Gele-ŋie   [baja-ni]   zoŋku-s'e,   läsi   zeute-ŋisie
invite-IC   rich-3SG   poor-N   much   food-V.PRP
tukca-zi,   tukca   ule:-we-ni.
hare-INST   hare   meat-ACC-3SG
The poor man invited (the rich one), cooked much food of the hares, the hare
meat.

Uta   diga-si:,   xauntasi:,   "Si   ono   wa:-i   tukca,
that   eat-IM.PRP   ask.PRP   you   how   kill.PAST-2SG hare

lä   egdi   tukca-wa?
very   many   hare-ACC
Then they ate, (the rich man) asked, "How did you kill so many hares?

Lä   egdi   ono   wa:-mu?
very   many   how   kill-INF
How can one kill so many?

[Si]   bi   sin-digi-de   egdi   wa-zaŋa-i   tukca-wa.
you   me   you-ABL-FOC   many   kill-FUT-1SG   hare-ACC
I will kill even more hares than you did.

Si   wac'a wa:-i."
you   little   kill.PAST-2SG
You killed little."

"Ge,   maŋga-zi   wal'a-ta-i-ze."
well   strong-INST   luck-PERM-2SG-HORT
"Well, good luck!"

Mafa   gdeli   baja   mafa   zug-tigi   ŋeni-e-k,
old.man   FOC   rich   man   house-LAT   go-PAST-EXPR
timana-ni   aŋi   mamaka-ni   dian-a-ini,   "Dogdie,   si!
tomorrow-3SG IND   wife-3SG   say-0-3SG   listen.IMP.2SG you
The rich old man went home and the next day he said to his wife, "Wife!
Sina-da-za-fie,   bi   tukca-wa   ceminele-ze-m(i),
burden.frame-V-SUBJ-1PL.IN   me   hare-ACC   cheat-SUBJ-1SG
uli   kä-la-ni   kepte-ne-ze-mi,   tukca   min-a-wa
river   near-LOC-3SG   lie-DIR- SUBJ-1SG   hare   me-0-ACC

gune   zug-tigi   kawa-tigi   gazi-le-ti."
EV   house-LAT   tent-LAT   bring-PURP-3PL
Let us pack my burden frame, I will cheat the hares, I will go and lie near the
river, so that the hares bring me back home.

"Si   j'eu   mute-zeŋe-i,   j'eu   si..."   mamaka-ni
you   what   can-FUT-2SG   what   you   old.woman-3SG
dian-a-ini.
say-0-3SG
"How can you (do this)," says his wife.

Ge,   [si ute be].
well   you that like
"Well, it will be like that.

Bi   ute be   zoŋku ... ”
me   that like poor
I (will do) like the poor man did.”

ŋene:-ni   sina-da-na:,   uli   kä:-tigi-ni
go.PAST-3SG   burden.frame-V-PC.SS   river   side-LAT-3SG
ŋene:-k,   uli   kä-la-ni   kepte-nie,
go.PAST-EXPR   river side-LOC-3SG   lie.PAST-3SG
kepte:-i..
lie-PRP
He went to the river bank having packed the burden frame and lay near the
river.

Ele   bude bede   kepte-ini,   kepte-ini.
soon die   like   lie-3SG   lie-3SG
He was lying as if he was going to die.

Omo   tukca eme:n-zi:,   “Sakt'ai   tukca-nie   haigugugu,
one   hare come.PP-INST.SS   willow.thicket hare-3SG   INTER
mafa   i:m(i)   bude:-nie   haigugugu.
old.man   why   die.PAST-3SG   INTER
One hare came (and said), “Hares from the brush willow thicket, why did the
old man die?

Ai-ŋ'ei   tukca-nie   haigugugu,   eme-je-ue   haigugugu.”
fir.tree-N hare-3SG   INTER   come-IMP-2PL.EX   INTER
Hares from the fir-tree thicket, come here.”

Tukca-ni   em'e,   sakt'ai   tukca-ni   bi:
hare-3SG   come.PERF   willow.thicket hare-3SG   be.PRP
tukca-ni   eme-kte:-ti,   lä   eme-kte:-li.
hare-3SG   come-DIV.PAST-3PL   many   come-DIV.PAST-3PL
The hares came up, hares living in the brush willow thicket
came together, many came.

Lä   tukca mogolie mogolie   xuli:,   jeukte-si:.
many   hare   around   around   walk.PRP   check-IM.PRP
Many hares walk around and check (if he is really dead).

“Neu-gi-ze-fi   kawa-tigi,   mama-tigi
bring-REP-SUBJ-1PL.IN   tent-LAT   old.woman
od'o-wo,   od'o   gekte-i-we-ni.”
grandfather-ACC   grandfather   freeze-PRP-ACC-3SG
“Let us bring the frozen old man back to the bark house, to his wife.”

Ge,	*neu-gi-li,*	*ge,*	*eme-li*	*omo*	*tukca*
well	bring-REP-3SG	well	come-3SG	one	hare

xukti-li-e-ni,	*ku'ai-ni*	*p'ali,*	*ku'ai-ni*	*due-ni*
skip-INC-PAST-3SG	ear-3SG	black	ear-3SG	end-3SG

p'aligi.
black

They started to carry him, here comes a hare with black ears, with black ends of the ears.

"*Alasi-je-u*	*haigugugu,*	*alasi-je-u*	*haigugugu.*
wait-IMP-2PL.EX	INTER	wait-IMP-2PL.EX	INTER

"Wait, wait!

E-zi-u	*nixe!*
NEG-IMP-2PL	do

Do not do it!

Tineŋi	*min-e-we*	*ute*	*bede*	*omo*	*uti*	*zoŋku*	*Kanda*
yesterday	me-0-ACC	this	like	one	that	poor	Kanda

mafa	*min-e-we*	*ute*	*bede-gdeli,*	*ku'ai-la-i*
old.man	me-0-ACC	this	like-FOC	ear-LOC-1SG

p'alig(i)-de	*ku'ai-de*	*aŋi.*
black-FOC	ear-FOC	IND

Yesterday one poor old man, Kanda mafa, (cheated) me like this, (that is why) my ears are black.

Uli-tigi	*wende-je*	*a-wa,*	*uli-tigi*
water-LAT	throw-IMP.2SG	this-ACC	water-LAT

wende-i,	*gun-e-ini,*	*mafasa-wa.*"
throw-IMP.2SG	say-0-3SG	old.man-ACC

Throw him, this old man, into the water, he said, throw him into the water."

Gegege	*uta*	*düsi: ..,.*	"*Uli-tigi*	*wende-je*
INTER	that	hear.PRP	water-LAT	throw-IMP.2SG

haigugugu, e-zi-u	*neu-gie*	*haigugugu,*"	*xe:ti:-ni.*
INTER, NEG-IMP-2PL	carry-REP	INTER	shout-3SG

The old man heard it, "Throw him into the water, do not carry," he shouted.

Xe:ti-m(i)	*xe:ti-mi*	*tukca*	*ono-dom*	*ono-dom*
shout-INF	shout-INF	hare	how-IND	how-IND

xukti-ne:-ni.
skip-DIR.PAST-3SG

Shouting the hares skipped this way and that.

"*Gegege,* *uli-tigi* *wende-ze-fi,* *uli-tigi*
INTER water-LAT throw-SUBJ-1PL.IN water-LAT
wende-je, *gun-e-ini.*
throw-IMP.2SG say-0-3PL
"Let us throw him into the water, throw him into the water, (the hare) said.

Tineŋi *xai* *uta-zi* *zoŋku* *zoŋku* *mafasa* *min-e-(we)*
yesterday too that-INST poor poor old man me-0-(ACC)
aŋi-e-ni *ute* *bede* *cemine:-ni.*"
IND-PAST-3SG this like cheat.PAST-3SG
Yesterday, too, the poor old man cheated me like this."

Ge, *uli-tigi* *z'e* *wende-li: ...* *bogolo* *uli-tigi*
well water-LAT as.soon.as throw-3SG f fat water-LAT
wende... *jazata* *xelibe* *te:-gi-e-ni,*
throw of.course quick get.up-REP-PAST-3SG
omo *omo-wo* *tukca* *zuke* *zawa:-ni* *mafasa,*
one one-ACC hare hardly catch.PAST-3SG old.man
baja *mafa.*
rich old.man
As soon as they threw the fat old man into the water, the man, the old man, got up
quickly and hardly caught one hare.

Ketige *uli-tigi* *wende:-ni.*
nearly water-LAT throw.PAST-3SG
They nearly threw him into the river.
ŋene:-ni *zug-tigi,* *ji:,* *tukca,* *sina-wa*
go.PAST-3SG house-LAT enter.PRP hare burden.frame-ACC
aŋi *neu-gi-e-ni.*
IND bring-REP-PAST-3SG
He went home, entered, brought back one hare and the burden frame.

"*Ketige* *min-e-we* *uli-tigi* *wende-du-ge* *tukca-ziga*
nearly me-0-ACC water-LAT throw-PL-PERF hare-PL
sañäwo:noni, *min-e-we* *cemine:-ni,* *ei* *omo-to*
damn me-0-ACC cheat.PAST-3SG this one-REST
tukca *zawa:-mi,* *omo-to* *tukca ...*
hare take.PAST-1SG one-REST hare
"The hares nearly threw me into the river, damn, they cheated me, I have
caught only one hare, only one."

Uti *zoŋku* *mafasa-de* *iñekte-ili,* "*Gegege,* *ono*
this poor old.man-FOC laugh-3SG INTER how

min-a-wa   *zakt'a-si:*   *tukca-du*   *uli-tigi*
me-0-ACC   do.like.another-PC.SS   hare-DAT   river-LAT
keti(ge)   *wende-wo:-ni.*
nearly   throw-PAS.PAST-3SG

The poor old man laughed, "Ha-ha-ha, he did like me, (but) was nearly thrown into the river by the hares."

Chapter 26
Thematic lexicon

The thematic lexicon represents the core vocabulary of Bikin Udihe grouped into conventional semantic fields. The structure of the lexicon is to some extent based on Kibrik and Kodzasov (1990), however, it differs from it both in section divisions and in the position of concrete words. Within each section words are organized on semantic grounds, while the list of ideophones in 26.3 is presented alphabetically. The lexicon of the Northern dialect is fairly comprehensively represented in Simonov and Kjalundzjuga (1998–1999).

26.1. Nominals

26.1.1. Body

26.1.1.1. Head and neck

head	*dili*
neck	*müö*
skull	(of a bear) *zei*
chin, jaw	*zei*
face	*degdi*
cheek	*sasa*
Adam's apple	*kaŋue*
forehead	*xeje*
temple	*kämikte*
eye	*ja:*
wall-eye	*käktugu*
pupil of the eye	*niziga*
eyelash	*samikte*
eyebrow	*guluge*
eyelid	*kempukte*
ear	*ku'ai*
lobe of the ear	*cempukte*
nose	*ŋö:*
beak	*zogzo*
back of the head	*kekpese*
top of the head	*temuge*

mouth	*aŋma*
lip	*xeme*
tongue	*iŋi*
gum	*texe*
tooth	*ikte*
milk-tooth	*soŋoso ikteni*
fang	*guja, suka*
molar	*s'aiguni*
throat	*zokpo,* (sore) *kute*
bronchial tubes, wind pipe	*kogu*
palate	*ke*
muzzle, snout	*lüimo*
antlers, horns	*je:*

26.1.1.2. Trunk

body, trunk	*beje*
dead body	*buniŋe*
back	*aka*
side	*kente*
shoulder	*bogdolo*
breast	*xaba*
chest	*tiŋe*
udder	*xaba*
nipple	*xaba*
waist	*eŋeze,*(back part) *sogdö, da:ma*
penis	*w'oso,* (of a boy) *kaŋgu*
vagina	*wa:,* (of a girl) *luktei*
testicles	*bu:ŋi*
tail	*igi,* (of a fish) *kemdexi*
bottom, anus	*ai*

26.1.1.3. Extremities

arm	*ŋala*
paw	*bugdi*
elbow	*iso:*
hand	*ŋala*
fist	*saŋtu*
palm	*xaña*
finger	*uña,* (second) *sö:,* (third) *dulumti,* (fourth) *čimcai ag'ani,* (fifth) *čimcai*

phalanx	*to:*
thumb	*xo:*
nail	*waikta*
claw	*cof'o*
handful	*cof'o*
back of the hand, instep	*ŋumni, xaña umnini*
nipper	*euŋge*
foot of web-footed	*pataga*
sole	*xagdigi*
leg	*bugdi*
ankle	*kuandugu*
shin-bone	*uiŋki*
heel	*(ŋ)iŋti*
hip	*wo:*
knee	*xeŋe*
kneecap	*bölo*
lap	*bege*
hoof	(of a cow, deer, moose, boar) *(w)u:,* (one half) *kokco*
wing	*daptä*
fin	*zu:i,* (side) *usa,* (dorsal) *cösökö*

26.1.1.4. Internal organs and bones

heart	*mäwa*
lung	*eunte*
liver	*x'ei*
spleen	*a:mi*
stomach	*emugde*
gut	*sulukta*
tendon	*simu*
vein	*sakä umaktani*
marrow	*uma*
roe	*cafa*
bone	*gäma*
shoulder-blade	*sä:*
pelvis	*deuxi*
backbone	*ni:kta*
lumbar vertebrae	*da:ma*
fibula, radius	*ile*
thigh-bone	*boŋga*
joint	*zala*
cartilage	*kefutige, neptige*

26.1.1.5. Surface of the body

skin, hide	*nä*, (fish) *sugbu*, (of a bear) *ñata*
wool	*ñukte*
hair	*ñukte*
plait	*jakti*, (on the side) *xekele*, (behind) *bänza*
mane	*ñukte*
mole	*xanikte*
sore, scab	*koxo*
beard	*gu(z)akta*
moustache	*gu(z)akta*
feather	*ofokto*
pimple	*pusilakta*
scales	*e:je, ekte*
callosity	*sakta*
wound	*sie*
scar	*kalä*
bruise	*ñoko*
wrinkle	*bakči*

26.1.1.6. Soft substances and secretions

brain	*dui*
blood	*sakä*
sweat	*nieŋi*
tear(s)	*iŋamukta*
saliva	*zalä*
snivel, drool	*ligba*
bile	*silie*
gall	*zo:*
milk	*kos'o*
pus	*ñaŋña*
urine	*suo*
excrement	*amu*
bird' s dung, droppings	*saña*

26.1.2. Man

26.1.2.1. Kinship terms and related notions

relative	(of the same generation) *xa:*, (relative) *za:*, (by marriage) *seŋgite*
youth	*ñ'aula*

child	*sita*
boy	*b'ata*
girl	*xatala,* (small) *aziga*
man	*ninta*
woman	*a:nta*
old man	*mafasa, sagdinta*
old woman	*mamaka, sagdinta*
older man from the same kin	*od'o*
older woman from the same kin	*mama*
father	*abuga*
mother	*eniŋe*
son	*b'atama sita, b'ata*
daughter	*azigama sita, aziga*
grandmother	(father's or mother's elder sister) *mama,* (maternal) *laulou,* (paternal) *neinei*
grandfather	*od'o,* (paternal) *jeje,* (maternal) *lauje*
grandchild	*sunze, omölo*
brother	(elder) *ag'a,* (elder, of a woman) *ñazakta,* (younger) *neŋu*
sister	(elder) *exe,* (elder, of a man) *xuñazi,* (younger) *neŋu*
uncle	(mother's brother) *gos'o,* (father's elder brother) *daja* or *od'o,* (mother's sister's husband) *ifu,* (father's younger brother) *su:su,* (father's sister's husband) *gufu*
aunt	(father's sister) *gugu,* (father's elder brother's wife) *da:niŋa,* (father's younger sister, father's wife younger than mother) *exe,* (father's younger brother's wife) *se:niŋa,* (mother's elder sister) *iñaŋa,* (mother's brother wife) *gimu*
husband	*mafa*
wife	*mamasa*
spouse	*gagda,* (in an address) *dogdi*
bride	*mamasaŋati*
groom	*mafaŋati*
mother-in-law	*mama, eme,* (wife's mother) *ele*
father-in-law	*od'o, ama*
brother-in-law	(younger sister's husband) *keli,* (elder sister's husband) *auja*
sister-in-law	(wife's younger sister, younger brother's wife's younger sister) *bene,* (elder brother's wife) *seuze* or *exe*

son-in-law	*kodu*
cousin	*zalä,* (younger) *ñazakta,* (mother's elder sister's child) *to:xo*
nephew, niece	(elder sister's child) *neŋu,* (younger sister's child) *inas'a*
twins	*ad'au*
orphan	*aŋaza*
widow	*nau, nau a:ntani*
widower	*nau, nau nintani*
clan, kin	*ze:*
family	*zugdiŋke*
old maid, spinster	*xatala mamani*
bachelor	*poutuize*

26.1.2.2. Social roles

neighbour	*nimeŋke*
guest	*zima: ni:*
friend	*anda*
enemy	*bagäu*
master, owner	*xente*
ruler	*eze*
chief, boss	*zaŋgä*
oldest man	*sagdimzi*
hired worker	*lauzi, kekese*
servant	*elči*
soldier	*cawa:*
merchant	*xudasi: ni:*
teacher	*säŋsäŋa, učiteli*

26.1.2.3. Nationalities

Udihe	*udie*
Chinese	*niŋka*
Russian	*lusa*
Japanese	*i:bene*
Korean	*gauli*
Jakut	*joko*
Evenki	*kile*
Nanai	*maŋmu*
Oroch	*namuŋka*

26.1.3. Animals

female	(of small beasts) *guas'a*, (of fishes, birds) *eñece*, (of hoofed animals) *eni(n)*
male	(of small beasts) *mugeti*, (of fishes, birds) *amina*, (of hoofed animals) *logoso, etige* (of tiger and bear)

26.1.3.1. Domestic animals and fowl

domestic animal	*wo:*
cow	*ja:*
pig	*wagä*
horse	*mui*
dog	*in'ei*
puppy	*kasanziga*
cat	*keige*
hen	*n'au*
duck	*gaja*

26.1.3.2. Beasts

beast, animal	*bui*
badger	*jandasa*
racoon-dog	*nautu*
hare	*tukca*
squirrel	*oloxi*
fox	*sul'ai*
wolf	*ñeŋu*
chipmunk	*xualibanza*
mouse	*siŋe*
shrew	*čundie*
rat	*sagdi siŋe*
marten	*kai(a)*
lynx	*tibzexi*
hermine	*zelexi*
sable	*ñö:*
otter	*z'oto, zugu*
glutton	*oŋdo*
Siberian weasel	*solö*
Manchu deer	*käŋa*, (one-year old) *sigis'a*, (young) *barakča*
roe	*giusa, pauza*

moose	*ogbö*
boar	*nakta*, (one-year old) *sü:, gulugese*, (female) *atiga*, (male) *zei*
musk-deer	*anda*
tiger	*kuti*, (cub) *kuti xuga-ni*, (one-year-old) *kuti bakana-ni*, (two-years-old) *dükto*
snow leopard	*meku*
bear	*mafa, soŋgo*, (cub) *xuga*, (one-year-old) *bakana*, (Manchu) *na:niɲi*, (Himalayan) *guaizima*
leopard	*simoule*
lynx	*tibzexi*
pole-cat	*selende*
monkey	*xeuze*
jackal	*zaku*
bat	*elegdige*
flying squirrel	*bokto*

26.1.3.3. Birds

small singing bird	*čind'a*
bird of prey	*gäxi*
wild duck	*gaja*, (*Anas formosa*) *cuguse*
raven	*wali*
crow	*g'ai*
sparrow	*zätöu*
cuckoo	*keku*
owl	*guakči*
eagle-owl	*ukä, ga: mafa*
eagle	*käsa*
hazel-hen	*sumuxi*
wild goose or swan	*ñuŋñai*
heron	*ŋasaxi*
heath-cock	*aima*
woodpecker	*boxolo*, (big) *kuexi*
jay	*ju:xä*
wood pigeon	*ku:nti*
magpie	*pa:mp'ai*
night bird (*Otus sunia*)	*topto*

26.1.3.4. Cold-blooded animals, fishes, and water animals

fish	*sugzä*
greenling	*zauŋa*
bulltrout	*zeli*
burbot	*čä:*
salmon	(Siberian salmon) *dawa*, (humpback salmon) *oxo,*
crawfish	*ceŋdexi*
pike	*guese*
minnow	*ilondo*
chub	*jabada*
roach	*jalä*
sazan	*kaktä*
sig, whitefish	*kali*
bullhead	*las'a*
grayling	*ñugusa*
crucian	*duguaza*
goby fish	*l'asa*
Misgurnus anguillicaudatus	*sumundi*
shellfish	*ga:la*
snake	*kuliga*, (small) *miki*
frog	*e:xi*
toad	*ja:la*
tortoise	*waŋba*
grass-snake, sledge runner	*zabda*
snail	*zauda*
fry	*wajakta*
whale	*kalima*

26.1.3.5. Insects

insects	(in water) *kuliga*, (small) *kukpu*
worm	*kuligas'a*, (earth) *silikte*
fly	*gobo(do)*
wasp	*afun'au*
gadfly	*ige:*
bee	*kü: goboni*
mosquito	*ŋamakta*, (large) *cincaula*, (in autumn) *xumukte*
moth	*pöu*
ant	*iktente*
butterfly	*kuaña*, (night) *gawakta*

spider	*ataxi*
cockroach	*zaŋlaŋa*
flee	*sua*
loose	*kumuge*
forest-bug	*exinie*
tick	*käfa*
dragonfly	*gindaula*
caterpillar (hairy white)	*sefe*, (hairy green) *tuibo*, (not hairy) *ñolö*

26.1.4. Plants

26.1.4.1. Trees

tree	*mo:*
cedar	*kuŋka*
fir tree	*aikta*
birch tree	*talu*, (young) *cafakta*
oak tree	*oloŋkö*
Manchu nut tree	*kusikta*
poplar	*amigda*
larch tree	*ji:*
ash-tree	*bul'a*
aspen-tree	*xulu(gda)*
willow tree	*sakta*
elm	*tizaŋkä*
bird cherry tree	*isompo*
lime-tree	*eigde*
yew tree	*taktig'a*
cork tree	*kokto*
silver fir	*okto*
hawthorn	*zalikte*
Siberian apple-tree	*uliŋkä*

26.1.4.2. Bushes, shrubs, herbs

bushes, shrubs	*mokt'oi*
grass	*okto*
flower	*ila, xua*
berries	*gegbeŋku*
schizandra (a local creeper)	*usimpä, limonika*
barberry	*sa:*
raspberries	*etuŋgie bambatani*

blueberry	*dikte*
cranberry	*g'ata*
cowberry	*teukte*
berries of yew tree	*sama gegbeŋkuni*
red currents	*kosolo*
wild grapes	*musikte*
ginseng	*olondo*
poppy	*dajana*
lily	*gila*
Angelika (an edible plant)	*aunta*
hemp	*sikte*
honeysuckle	*xafakta*
goose-foot	*xucei*
a prickly bush	*kömpo*
fern	*ni:kte, (Pteridum) x'eutui bugdini*
horse-tail	*su:kte*
ledum	*seŋkie*
nettle	*xalaxai*
honey agaric	*zeŋmo*
moss	*labuge, lexeŋke*
water-plant	*kombokto*
slime, mire	*konolo*

26.1.4.3. Fruits, vegetables, crops

vegetables	*c'ai*
melon	*säŋguaza*
watermelon	*sigua*
grapes	*mesikte*
onion	*cuŋe*
garlic	*düce, (wild) disokto*
cucumber	*xuaŋgu*
potatoes	*tuduze, sañü*
squash	*wogu, siguli*
beans	*deuze*
pea	*tuli*
corn	*boulimi, boulime*
millet	*zakta*
rice	*zaŋmi*
green radish	*loboi*
mushroom (growing on trees)	*bot'o, mougu*

26.1.4.4. Parts of plants

wood	*mo:*
brushwood	*käfakta*
branch	(bough) *ga:*, (thin) *sue*
leaf	*abdä:*
bark	*wakta*
root	*texe*
acorn	*wikta*
bast	*ilakä*
nut	(cedar) *ikte*, (Manchu) *kusikta*, (hazel) *zeŋzegei*
seed	*ceme, ikte*
stamp	*mugd'a*
excrescence on a tree	*kanda*
thorn	*köŋpo*
pine-cone	(of fir-tree, larch tree) *koŋgolo*, (of cedar) *ñanta, seutige*

26.1.5. Food and drinks

food	*zeu*
flour, dough	*mäna, efe*
corn flour	*c'aza*
yeast	*mäna oktoni*
bread	*xeleba*
roasted flour with sugar	*mänca*
sugar, sweets	*sata*
salt	*s'ei*
honey	*kü:*
millet or rice broth	*zakta*
millet or rice porridge	(thick) *gampa*, (thin) *lala*
bun	*pampuška*
flat cake	(fried) *bula* or *kakčima*, (with bird-cherries) *ja:, galäŋa*
meat	*ule:*
meat dumplings	*maŋtu, bänči*
dried fish	(whole salmon) *ma:la*, (half of salmon) *ñamikta*, (salmon without roe) *deipte*, (cooked) *solimi*
boiled fish	*olo:*
raw fish	*t'ala*
fat	*imo:*, (boiled in pieces) *leme*

egg	*umakta*
potato meal	*läncei*
pickled vegetables	*saŋcaiŋisa*
soup	*colo,* (made of dried salmon) *solimi*
juice (of berries), broth	*sile*
tree sap (of birch)	*čöŋki*
milk	*ja: xabani*
vodka	*'ai*
tea	*čaja*

26.1.6. Clothes and jewellery

gown, dress	*tege*
trousers	*xeig I*
apron	*leli*
abdominal band	*deudeli*
(summer) shirt	*mokčö*
head-dress	*pumpu*
sleeve	*ukie*
scarf (made of squirrel tails)	*mo:pti*
cap	*au,* (winter hunting cap) *bogdo*
kerchief	*seuzine*
collar	*linze*
ear-flaps	*zauga*
belt	*umu,* (small) *telie*
footwear	*uŋta,* (home) *watuze*
mittens	(leather) *kol'o,* (cotton wool) *wambaxi,* (fabric) *kasama*
knee bandage	*wa'ipti*
jewellery	*jaŋza*
ring	*uñapti*
nose-ring	*s'a*
beads	*moŋoli*
earring	*weige*
bracelet	*belepti*
button	*to:*
spectacles	*jagdugu*
fan	*sanza*
hair lace	*weiptiŋke*

26.1.7. Material activity

26.1.7.1. Tools

instrument	*xazu*
braking tool	*kaiŋku*
scratching tool, scraper	*kede, (w)u:*
knife	*kusige*, (with crooked blade) *afili*, (for scratching the ornament) *u:dugu*
scissors	*xaza*
axe	*suese*
hatchet	(for the boat bottom) *xe:meŋku*, (for the boat inside, with crooked blade) *dosiŋku*
hammer	*xaluga*
saw	*züi*
hoe	*gautu*
drill	*oŋo*
awl, gimlet	*sigu*
plane	*tüifaŋa, tüibo*
nail	*tikpe*, (small) *cebe*
twist tool	*maktigi*
pincers	*euŋge*
file	*jö:*
sickle	*jandau*
crow	*keli*
spade	*guaŋčou*
mill	*lamo:*
stretching frame	*kaŋau*
bellows	*kuge*
anvil	*zile*
whetstone	*päŋku, sue*
fire-stone, flint	*bu:*
needle	*iŋme*
thimble	*uñapti*
thread	*siekte*

26.1.7.2. House objects and utensils

utensils, things	*xaläŋgie*
dishes	*tekpu*
spoon	*uniŋa*
sharp stick for taking meat	*sikpou*
ladle	*kuñzi*

scoop	*s'ou,* (for boiled fish) *juge*
chopsticks	*sabuga*
bowl	(wooden) *moxo,* (of birch bark) *xasa*
basin	*penze*
mug	*cawa*
plate	(wooden) *oto,* (china*) caŋmi*
bottle	*tukulu, baŋza*
caldron, pot	(large) *joxo, kala, loŋko*
sauce-pan	*maŋgwana*
kettle	*joxo, cuanza*
grater	*caŋku*
bucket	*mulexi,* (of birch bark) *mogu:*
grill	*länzi*
cutting board	*si:ŋku*
mat	*soktou*
rag, duster, nappies	*lugba*
broom	*akpuŋku*
oven	*zauxu*
stove	*biliči*
chair, stool, bench	*teŋku*
mirror	*xanaŋku*
table	*zueze*
chest	*konz'o*
box	(made of birch-bark) *xasa, komoxo*
backpack, burden frame	*sina*
cradle	*emuge*
(plank) bed	*kaŋa*
pillow	*zentu, tiu*
blanket	*xula*
mosquito curtain	*zampa*
store-house	*zali,* (small) *deke*
sticks for drying fish	*degumu*
scabbard	*komixi*
paper	*xauja*
lid, cover	*wopti, deipti*
handle	*xei*
rope	*xeku*
lock	*jausu*
key	*jausu luktaŋkuni*
hook	*ob'o*
pipe	*dei*
tobacco-pouch	*xali*
comb	*igdu, mele*
soap	*ji:ze*

toy	*guezeŋe, gusikči*
doll	*z'afa*
sack	*keudi, lamba*
bag	(for hunting) *padu*, (for tools) *puta*
money	*zä:*

26.1.7.3. Dwelling

city, town	*xoto(n)*
settlement	*bagdu, ige*
house	*zugdi*, (winter) *tueze*
tent, yurt	(grass) *kawa*, (bark) *colo, maiga*
night shelter	*aŋa*
door	*wopti*
doorway	*uke:*
roof	*zugdi xo:ni*
rafter	*saŋi*
floor	*weige, pala*
window	*pa:, coŋku*
wall	*kepte*
sleeping place	*bä:*
entrance hall	*utulu*
threshold	*uke: te:ni*
hearth	*to:pti*
flue	*saŋnämugu, tuŋmuge*
fence	*zaŋza*
nest	*xui*, (of a squirrel) *lo(gö)i*
burrow, hole	*agdu*, (in the tree roots) *gua*

26.1.7.4. Hunting, fishing

bow	*bei*
bow-string	*alaŋa ju:ni*
arrow	*tada*, (with the soft end, used by children) *zaŋta*
shaft of the bow	*alaŋa*
arbalest	*peu*
gun	*mä:usa, mäunda*, (small-calibre) *päkčika*, (double-barrel) *kab'ou*
cartridge	*ma:li*
fishing rode, hook	*um'a*
net	*adili*

harpoon	*meime,* (large) *zogbo*
trap	(iron) *kakpa, lau, ča:za,* (for small animals) *laŋi*
spear	*gida*
hunter's horn	*buniŋku*

26.1.7.5. Transportation

boat	(canoe) *ugda,* (large) *'ana,* (Russian) *temtige*
oar	*pataxi,* (for canoe, small paddle) *megu,* (long) *su:*
pole for pushing a boat	*gäu*
scull	*gäu*
sledge	*tuxi*
dog harness	*ala*
plane	*fuetiŋe*
train	*xuece*
carriage	*se:*
ski	*kiŋgele,* (fur-lined) *suala,*

26.1.7.6. Cloths

cloth	*sexi*
silk	*seule*
wool	*iŋakta, tanza*
brocade	*gäncu*
leather(n)	*ña:*
fish skin	*sugbu*
cotton wool, wadding	*d'a*
bast	*ilakä*
broadcloth	*zanza*

26.1.8. Non-material culture

26.1.8.1. Verbal activity

word, language	*keje*
name	*gegbi*
tale	*nimaŋku*
legend, story	*teluŋu*
riddle	*nagbuŋku*
news, information	*mede*

26.1.8.2. Music

shaman's tambourine	*uŋtu*
shaman's beetle	*koŋokto*
bells	*komokto*
flute	*kiŋula*
jaws harp	*kuŋkai*
string instrument	*zuläŋka*
song	*jexe*

26.1.8.3. Traditional beliefs and rituals

god	*bua*
shaman	*sama*, (evil) *kaŋmaŋku*
ritual pole	*tu:*
shaman mask	*xambaba*
shaman belt	*jampa*
idol of a good spirit	*sewexi*
spirit	(evil) *ogzo*, (evil) *amba*, (of nature) *eze*, (fire) *puzä*, (water) *temu*, (shaman's spirit) *sewe*
soul	*xaňa, ege*
ream of dead	*bunige*
guessing stone	*xaŋaŋku*
straw dolls used by shamans	*pudeŋku*
sin	*sondo*
dragon	*muduli, süŋmu(li)*
altar	*pü:, kesi geleŋku*, (Chinese) *möu*
gnome	*bagzä*
talisman	*boboi*
ritual lard	*ulikte*

26.1.8.4. Abstract notions

luck	*kesi*
misfortune	*zuge*
honor, respect	*gebu*
strength	*meje*
dream	*tokö*
sound	*uga*
voice	*keje*
illness, disease	*unugu*
pain	*uni*

fault	*baita*
smell, scent	*xu(n), bapta*
taste	*amta*
debt	*naŋda*
share, part	*obo*
law, custom	*koli*
shape	*due*
colour	*bono*
space	*colo*
part, piece	*pei*
end	*meje*
occasion	*muda*
circle	*monto*
side	*ogbo(n)*
half	*kakt'a(n)*
gap	*agda*
kind, sort, kin, age	*se:*
spare time	*eke*

26.1.9. Natural objects and substances

world	*ba:*

26.1.9.1. Earth

earth, soil	*na:*
taiga	*ba: xo:ni, ba:za geni*
hill, mountain	*we:*, (rocky) *käma*
rock	*gula*
cave	*oŋgo*
gorge	*zeu, jakpa*
mountain pass	*ada, tumie*
road, track	*xokto*
glen	*ala*
field, clearance	*biga*
bog	*n'au*
pit	*pöŋgo*

26.1.9.2. Water objects

water	*uli*
foam	*afuti*

flood	*mude*
wave	*jaki, xene*
drop	*sabda*
bubble	*komokto*
stream	*eje*
spring	*ñuxala*
lake	*toŋi*
sea	*namu(n)*
seashore	*kä:*
creek, back-water, gulf	*'asa*
river	*uli,* (small) *bäsa*
river-bed	*zu:*
river mouth	*data*
river-head	*de:*
arm of a river	*jogoso*
stretch of a river	*unakta*
fork of a river	*zawa*
blockage of a river	*moŋo, keŋme*
dried river-bed	*jaŋata*
turn of a river	*mogz'o*
river bend	*töŋo*
riverbank	*kä:*
ford	*oloŋko*
bridge	*deumi*
spit	*bita*
shallow	*ugbe*
rapids	*gidäŋku*
watering-place	*zempu*
spawning place	*dawasikči*
island	*bugasa*

26.1.9.3. Sky

sky	*ñaŋña(n)*
sun	*su:*
moon	*bä:*
star	*waikta*
cloud	*tokö*
rainbow	*agdi sauŋkini*
Mars	*xuakta*
Milky Way	*Kanda mafa duktama:ni* (literally: 'the old man Kanda's skiing')

Ursus Minor   *nada xatala*
Ursus Major   *zali baŋnä:ni*

26.1.9.4. Natural substances

gold   *aisi*
silver   *meŋmu*
iron   *sele*
tin   *jaŋtä*
copper   *tusi*
sand   *oňokto*
stone   *zolo*
dust   *p'ai*
clay   *t'apti*
lead   *tuza*
mud   *lifakta, tifakta*
ashes   *xulepte*
coal   *jala, zaŋa*
ice   *zuge*, (smooth river ice) *kägda*
resin   *ňute*
soda   *zäna*

26.1.9.5. Natural phenomena

wind   *edi*
storm   *si:*
thunder   *agdi*
rain   *tigde*, (with snow) *lada*
snow   *ima,:* (newly-fallen) *zaka*
fog   *tamňa*
hail   *bono*
fire   *to:*
smoke   *saŋňa*
frost   *gekti*
steam   *sogdo*
shade   *umni*

26.1.10. Time

year   *aŋa*
month   *bä:*
spring   *neki*

summer	*zua*
autumn	*bolo*
winter	*tue*
day	(when counting time*) neŋi-(ni),* (time of the day) *ineŋi-(ni)*
night	*dogbo*
evening	*sikie*
morning	*tima-(ni)*
dawn	*gäwa, ine*
noon	*saŋxua*

26.1.11. Spatial notions

south	*züe, fuleŋe*
north	*sugala*
place behind	*tauze-, ca:-,* (in movement) *amä:(za)-,* (on the back) *aka-*
place before	*zulie-, ñondu-, ño:-*
place on the left side	*dieŋe-*
place on the right side	*a:ŋa-*
place the opposite side	*bagä:(za)-*
place upstream	*solie(ze)-*
place downstream	*ezi(ze)-*
place far from the river bank or the fire	*die-*
place close to the river bank or the fire	*ŋä:-*
place inside	*do:-*
place outside	*ba:-*
place on the top	(at the pointed end) *due-*
place on the surface	*(w)ui-/we:-, ge:, ojo-*
place above	*xo:(n)-*
place below, under	*xegie-*
place between	*agda(n)-*
place along	*cu-*
place in the middle	*dulaŋki-,* (in the center) *taŋki-*
place close	*auze-, da:(s'a)-*
place near	*kä:-*
place far away	*go:-,* (very far) *cai-*
place on the side	*e:-, ogdo-*
corner	*koso(n)*
angle	*coto*

26.1.12. Adjectives

26.1.12.1. Colour

red	*xutaligi*
green	*ñöligi,* (emerald-green) *isenti*
white	*c'aligi*
yellow	*xoligi*
black	*p'aligi*
gray	*xuŋnaligi*
blue	*ñöligi*
orange	*soligi, kancantu*
brown	*xexeligi*
pink	*duŋmal'a*
purple	*duŋmal'a*
violet	*zidi*
dark	*xakti:*
pale	*käligi*
stripy	*kedeligi*
spotty	*toptoligi*
transparent	*gegze*

26.1.12.2. Taste

tasty	*xei, amtaxi*
untasty	*muktu*
sweet	*sata, zei*
sour	*zui*
bitter	*guači*
salty	*s'ei*

26.1.12.3. Form and size

big	*sagdi*
small	*ŋic'a*
tall, high	*gugda*
low	*neptes'e*
thin	(of round objects) *nemnes'e,* (of flat objects) *nemuges'e*
thick	(of flat objects) *dä:mi,* (of round objects) *bou*
wide	*eŋme*
narrow	*kaŋgäsa, käbau,* (of the internal space) *xaŋgäs'a*

deep	*suŋta*
shallow	*xaŋus'e*
short	*umac'a*
long	*wanimi*
ball-shaped	*bomboligi*
round	*montoligi, bombo*
flat	*nepteligi*
bulging, prominent	*kumpuligi*
pointed	*kicoligi*
sharp	*emei*
blunt	*e:de*
sparse, flimsy	*sembeligi*
sloping	*ŋeneptile*
crooked	*tokčigu, goj'ou*
concave	*zoŋgoligi*

26.1.12.4. Properties of men and animals

adult	*elu*
old	*sagdi*
fat	*bogo*
blind	*bali*
deaf	*koŋgo*
blind in one eye	*böŋgo*
hunch-backed	*boxo, logozo, logzolig*
strong	*kuixi, m'ai, maŋga*
weak	*ede*
ill	*unuguxi, sulei*
pregnant	*ge:nzi*
thin	*koŋo*
neat	*kika*
shaggy	*loxo, sezeligi*
curly	*kokčiligi*
naked	*mogzo, zoŋgo*
bald	*kotoi*
cheerful	*gabzi*
wicked, angry	*ke:*
alive, vivid	*inigi*
greedy-witted	*zana*
stupid	*diliga, paga, e:de*
clever	*mejexi*
skilful	*paki*
greedy	*digaŋku*

rich   *baja*
poor   *zoŋku*

26.1.12.5. Other physical properties

beautiful	*alagdig'a, uligdig'a*
nice, good	*aja*
bad	*ge:*
old	*da:mpi*
new	*imexi*
thin (of voice)	*limas'a*
high (of voice)	*lämuges'e*
low (of voice)	*eŋme*
loud	*igdi*
quite	*eke*
light	*enimes'e*
pliable	*zas'a*
hard	*m'ai*
wet	*ñuktu,* (of firewood) *ñaligi, čifoŋ'oi*
dry	*ñamai,* (a liquid) *bug*
cold	(weather) *iŋini:,* (objects) *gili:*
hot	*xekui*
prickly	*gaf'a*
bright	*ŋegze*
quick	*tuge*
swift	*ku'aja*
dirty	*tegbeni:*
clean	*ganziŋa*
empty	*keŋku*
full	*tapči*
whole	*muj'ei*
rotten	*ñäktu*
raw	*ñäligi*
slippery	*bugdi, käŋgu*
stinking	*xuxi, ñagdugu*
thick	(of food) *tekti:*

26.1.12.6. Other

left	*dieŋeze*
right	*aŋaza*
far	*go:*

near	*da:sa*
other	*xoŋto*
boring, tiring	*safani:*
funny	*ñemugdi*
interesting	*sebʐeŋke*
scary, terrible	*seuni:*
difficult	*maŋga*
unusual	*egdeŋge*
few, not numerous	*wac'a*
many	*egdi*
cheap	*zas'a*

26.2. Verbs

26.2.1. Being

be	*bi-*
become	*ede-*
live	*bagdi-*
stay	*eki-*
appear	*ilaktan-*
disappear	*anči-(gde) ede-*
get lost	*pama-*
hide	*digan-*
grow into	*bagdi-, ju:-*
turn into	*gua(lan)-*

26.2.2. Possession and change of possession

take	*zawa-*
buy	*gada-*
sell	*xudasi-*
fetch	*ge:ne-*
take with oneself	*xebu-*
take away	*ti:-*
treat	*sauli-*
catch, seize	*zawa-,* (with claws) *cokp'olo-*
hold	*zawasi-*
store, keep	*nekce-*
keep (animals)	*igisi-*
get	*b'a-*
use	*taulagi-*

bring	*gazi-*
take out	*ga:gi-*
steal	*zomi-*
find	*b'a-*
look for	*galakta-*
assemble	*gejene-*
gather, collect	*gegbe-, ga:gi-, tai-*
borrow	*naŋda-*
exchange	*kala-*
lose	*nodo-*
carry off, make away	*xuktu*
give	*bu-*
present	*suŋele-*

26.2.3. Motion

move	*ugi-*
go	*ŋene-*
travel	*xuli-*
stop	*eki-*
leave	*ŋene-, gulin-*
come	*eme-*
enter	*i:n-*
reach	*i:n-, nagda-*
return	*emegi-, mudaŋi-*
run	*tukä-*
escape	*susa-*
go down	*eu-*
go out	*ñu:-*
get up	*te:gi-*
climb	*tukti-*
cross	(a river) *dau-*, (a mountain) *we:li-*
walk, step	*gä:ŋa-*
step on	*xeŋde-*
fall	*tiŋme-*
rise	*degde-*
sit down	*te:-*
stand up	*ili-*
lie down	*kepte-*
perch	*do:-*
turn	*xu:gi-*
turn over	*kumte-*
swing, rock	*beke-*

let go	*tinda-*
follow, pursue	*'akta-, 'asi-*
catch up	*b'ono-*
fly	*dieli-*
flutter	*patana-*
stamp (dancing)	*leuli-*
crawl	*miki-*
sneak	*bujsi-*
jump	*xetigene-*
jump at, attack	*xokcu-, taumčile-*
gallop	*xukti-*
swim	*wajan-*
dive	(of a fish) *ñuxan-*, (of a man, a duck) *xuine-*
move up the stream	*sol'o-*
float down the stream	*eje-*
drive, turn out	*elemusi-*
carry on a sledge	*(j)uŋkäla-*
get on (a boat, a horse)	*una-*
ski	*duktama-*
moor	*agda-*
row with a paddle	*seude-*
push with a pole	*geude-*

26.2.4. Physical changes and influences (transitive)

put	*nede-*
hang	*l'o-*
drive out	*igbe-*
shake out	*giu-*
scratch	*negbeli-*,(with a scraper) *u:-*
tickle	*c'asi-*
press	*diŋe-*
squeeze	*si:-*
drag	*taŋda-, tana-*
pull	*taŋda-, ju:-*
carry	*neugi-, nexu-*
throw	*wende-*
drop	*tugbu:-*
hide	*zä:-*
hatch	*diŋe-, t'o-*
roll up	*likpa-*
strike, hit, beat	*koŋko-, paktana-*, (with an object) *dukte-*
break	*xai-*, (in two) *kaŋduli-*

twist out, dislocate	*xudugu-, xuduli-*
make a hole	*pogdogo-*
bend	*uwene-, kampi-*
touch	*wanta-, tuŋgala-*
push	*ana-, zoko-*
burn	*daga-*
kick	*baŋcana-*
kill	*wa-*
slaughter	*magi-*
wound	*siene-*
shoot	*mäusala-*
cut	*xua-*, (hair, beard) *kige*, (into small pieces) *zi:-*, (cut out) *gi:-*, (wood) *mine-*, (with an axe) *tokto-*
tear	(in pieces) *tagdi-*
wrap	*kapta-*
hew	*mo:lo-, xuaŋni-*
chop	*capca-, juosi-*
sharpen	*sule-*
open	*ñientile-*
kindle	*saula-*
extinguish	*su:si-*
lock	*jausule-, likpi-*
close	*kimpi-*
cover	*dakpi-*
smear, paint	*butu-*
tether	*xeke-*
untether	*lukte-*
tie up	*xeke-*
load	*teu-*
glue	*dagbu-*, (solid) *kamnu-*, (liquid) *ñoŋo-*
mix	*soli-*
stir	*sigilie-*
knead	*xo:-*
warm up	*ugdi-*
pour	*cudi-, kuŋgede-*, (out) *mantila-*
fill	*teu-*

26.2.5. Physical states and activities (intransitive)

stand	*ili-*
sit	*te:-*
hang	*l'oso-*

lie	*kepte-*
flow	*ekpene-*
bend	*neŋi-*
drawn	*jaŋsala-, ju:-*
squat	*čiso-*
fade	*amnä-*
get entangled	*ta-*
set (of the sun, moon)	*eŋe(gi)-*
melt	*une-*
boil	*xui-*
burn, catch fire	*zegde-*
freeze	*gakti-*
dry	*ogo-*
die out (of fire)	*su:-*
rot	*ñä:-*
grow mouldy	*xuŋnana-*
drip	*sabda-*
tear off	*loptogo-*
open	*nientile-, kokpigi-*
close	*kimpi-*
swell	*auli-*
break	*camna:-, buktaga-*
split	*kaktaga-*
burst	*puse(ge)-*
stick	*ta:-, lagban-, lakti-*
strike (of lightning)	*sakina-, talina-*

26.2.6. Physiological states and processes

sleep	*ŋua-*
wake up	*selegi-, mägda-*
dream	*t'osi-*
snore	*xuanti-, xeŋpi-*
eat	*diga-*
lap (of animals)	*dala-*
feed	*dalu-*
drink	*umi-*
get drunk	*sokto-*
be thirsty	*kogo-*
be hungry	*lali-*
choke	*xaŋka-*
choke with	*iku-, lua-*
choke down	*lua-*

suffocate	*xaŋka-*
chew	*sa:si-*
gnaw	*čika-*, (of a man) *kefuge-*, (of an animal) *ki(gi)xi-*
suck	*simisi-*
bite	*ikteme-*
kiss	*ñugi-*
swallow	*ŋiŋme-*
spit	*tu:nde-*
yawn	*zo:ni-*
blow	*pusi-*
belch	*jaktagi-*
itch	*utini-*
hiccough	*juku-*
breathe, sigh	*eikpesi-*
sneeze	*jeini-*
cough	*simpi-*
poison oneself	*jeusele-*
feel sick	*jemei b'a-*
catch a cold	*simpili-*
be ill	*sule-*
hurt	*uni-*
grow thin	*koŋo-*
twist	*xuduli-*
get cold	*gekti-*
faint	*ukana-*
sweat	*nieŋesi--*
urinate	(of a woman) *nuŋnugu-*
defecate	*amuktasi-*
ware (of)	*mili-*
start, shudder	*olokpono-*
weep, cry	*soŋo-*
sob	*suaini-*
water (of eyes)	*buli-*
get mad	*gulälali-*
give birth	*(sita) b'a-*
die	*bude-*
copulate	(of deer) *zawa(gdi)-*, (of birds) *po:-*
be tired	*deu-*
rest	*deumpi-*

26.2.7. Speaking and producing sounds

tell	*teluŋusi-*
say	*dian-, gun-*
talk, speak	*diasi-*
repeat	*alamasi-*
whisper	*sumumesi-*
ask	*xaundasi-*, (for something) *gele-*
explain	*ñumnisi-, alunusi-*
shout	*xeuti-*
pray	(ask for hunting luck) *kesi gele-*, (bow) *xeŋki-*, *möule-*
call, invite	*geisi-*
tease	*sunzu-*
complain	*xapti-*
scold	*nägda-*
gossip	*keku-*
scream	(of a bird of prey) *k'ägda-*, (of a woodpecker) *xokono-*
bark	*go:-*
roar	(of a tiger) *ŋamna-*
moan	*xokono-*

26.2.8. Perceptions and emotions

hear	*dodgi-*
listen	*düjsi-*
see	*ise-*
look	*isesi-*
glance	*eteŋi-*
smell	*ŋousi-*
feel, notice	*mede-*
want, agree	*ča:la-*
laugh	*iñe-*
smile	*iñemusi-*
love	*aju-*
like	*aju-*
be glad	*agda-*
be enthusiastic	*juede-*
dislike, hate	*galu-*
be afraid	*ŋele-*
be frightened	*bogoli-*
respect	*xeleni-*

be shy	*xagza-*
worry	*beŋtene-, xuaŋcule-*
be proud	*biulese-*
get bored	*safani: b'a-, ele-*
feel sorry	*muñali-*
get disgusted	*jemei b'a-*
be interested	*sebune-*
be angry	*sigdi b'a-, tagda-*
be surprised	*xono-*

26.2.9. Mental activity

believe	*ceze-*
suppose	*bodo-*
know	*sa:-*
forget	*oŋmo-*
understand	*egze-, b'apta-*
recognise	*tagda-*
think	*muisi-*
teach	*tatusi-*
learn	*tatusi-*
count	*taŋi-*
read	*taŋi-*
get accustomed	*ta(tu)ti-*
be expert at	*egze-*

26.2.10. Labour and everyday life

make	*wo:-*
work	*etete-*
build	*wo:-*
wash	*au-*
clean	*siki-, aunda-*
sweep	*akpu-*
peel	(potatoes) *kua-*, (fish) *e:-, sigie-*
wash oneself	*siki-*
wipe oneself	*akpisi-*
bathe	*egbesi-*
shave	*kiga-*
put on (clothing)	*teti-*
take off	(clothing) *asuktagi-*, (shoes) *luktagi-*
undress	*asukta-*

boil	*xui-*
cook	*olokto-*
roast	*kakčisi-*
smoke	(fish) *saŋmisi-*, (in big pieces) *seutesi-*, (skin) *ñusi-*
dry (in the air, sun)	*wagisi-*
process a skin	*eili-*
scrape a skin	*u:-*, *cosule-*
skin	*si:-*
brake leather	*kai-*
bark a birch tree	*uki-*
pluck	*ofodi-*
milk	*si:-*
saw	*züile-*, *la:-*
forge	*kuge-*, *tausi-*
plane	*kua-*
weave a rope	*tompo-*
cut down trees	*tugbu-*, *mo:lo-*
plant	*uje-*
dig	*ule-*
hunt	*wakca-*, (for fur animals) *batu-*
fish	*sugzäma-*, (with a fishing rope) *um'asi-*, (with a net) *adili-*, (with a harpoon) *aki-*, (at night) *taluna-*
set up a trap	*tule-*
take aim	*zu-*
orientate oneself	*zegeme-*
sew	*uli-*
embroider	*oño-*
write, draw	*oño-*
bring up	*igisi-*
take care	*tafäsi-*
marry	(of a woman) *mafala-*, (of a man) *mamasa-*
match-make	*seu-*
divorce, part	*dekte(gi)-*
compete	*geinigesi-*
rescue	*uisi-*
visit	*zima-*
play	*gusi-*
fight	*w'ali-*
pay	*tama-*
shamanize	*mouge-*

26.2.11. Modal and aspectual verbs

begin	*zafanda-*
finish	*mutu-*
stop	*wadi-*
can	*ñoni-*
be able	*mute-*
have to	*nixe-*
need	*zo:-*
be going	*kokpi-*
hurry	*xeline-*

26.3. List of ideophones

bakčam, bokčom	crooked (from pain)
bogdo-bogdo	overflowing
bokčom-bokčom	wrinkled
bom-bom	curled
bugdam	goggling
bugdumce-bugdumce	slippery
ča-ča	clapping wings
čak-čak	till dry
čak-čik	striking fire
c'am	till white
cau(-cau)	noisily, hissing
cef-cef	sharp
cek-cek	in readiness
cem-cem	sharp
čeŋei-čeŋei	ringing
ceŋdem	crooked
ceŋe-ceŋe	swinging
ceze-ceze	flimsy (of hair)
čige-lebele	urinating
čif(u)-čif(u)	wet through
čik-čik, čik-čigi	tiny
cili-cili	greasy
čim	slightly (bleeding)
čindem	thin (in waist)
ci:ŋge-ci:ŋge	dangling
cofok-cofok	the sound of male-deer hoofs
colo-colo	flimsy
cumda-cumda	torn very much
dakcai-dakcai	flapping wings

daŋdal(-daŋdal)	standing on end (of hair)
daŋdam, doŋdom	upright, standing on end
degbu-degbu	standing on end
dei-dei	frightened till one has goose-skin
doli-doli	fast (asleep)
dolo-dolo	deep (of little holes)
efu-efu	light, fluffy (of buns)
elusim	completely
gäga-gäga	growling much (of a dog)
gäll	boiled to pulp
gäŋdu-gäŋdu	completely
gar-gar	vivid
gete-gete	flimsy (of beard)
jala:-jala:	very black
jifu-jifu	not quite well (about health), tiredly
jiŋ(-jiŋ)	impudently
jolom	trough (to gnaw)
käbak	ringing
käf-käf	crackling (of trees fallen from the wind)
käl-käl	pale
kär-kär	the sound of shaving
käu-käu	squeaky
kedem	spotty
kef-kef	fallen from the wind (of trees)
kei-kei	steep; revenging
kembele:ke-kembele:ke	waddling
kemdeli-kemdeli	too fat (of a girl)
kerr-kerr, kärkär	crunching, cracking
kidem(-kidem)	standing on end (of hair, fur)
kigdum-kigdum	glossy, with a greasy spot
kiku-kiku	sound of squeaking
kilum	scowling
kitom-kitom	waddling
kixi-kixi, kixu-kixu	gnawing noise, the sound of snow crunch
kofi-kofi	completely (eaten or drunk)
kögbom	dead
koi-koi	scratching
kok-kok	hard
kokci-kokci	very ill
ko:ŋko-ko:ŋko	the sound made by a raven
kua-kua	rammed well
kuak-kuak	snoring
kuakta-kuakta	entirely, quite; completely dried out (about a river)

kulu-kulu	completely
kummäm-kummäm	all, entire (food)
kur-kur, kule-kule	in a hurry
kutum	the noise made when falling down
läbi-läbi	flexible
laŋa-laŋa	sticking (of snow to the ski or boots)
laxu-laxu	noiseless
läta-läta	loudly
lau-lau	very dusty
lebdeli	fluttering
lebdu-lebdu	flapping wings
lemde(-lemde)	fluffy
leŋke-leŋke	staggering (of walking)
liba-liba	dirty, muddy
limbi-limbi	soaked, weak
liŋa-liŋa	sticky
lokto-lokto, lopto-lopto	torn up, by jerks
loŋom-loŋom	tufted
loxo(-loxo)	curly (of a tree)
lou-lou	strong (fog)
lu-lu	blazing (of fire)
lü-lü	wet through
lumda-lumda	torn very much
lümde-lümde	wig-wag
mer-mer	to the ground (of cutting trees)
modor-modor	smeared with slobber
moŋtom-moŋtom	around
mugdi-mugdi	turning the behind
mur-mur, muⁱ-muⁱ	teethless
ŋafu-ŋafu	thick (of hair)
namu-namu	cozy
neptem	not light, flat (of buns)
nigbi-nigbi	strongly (of pulling)
nir-nir	easy (to peel off, to scale off)
ñoloŋ-ñoloŋ	limping
oŋom	falling off in shreds (of fur)
päktam	sticking easily
pali-pali	very black
p'am	till black
per-per, peli-peli	numb
peso	the sound made by a drinking female-deer
peu	boiling
pice-pice	into smithereens
piek-čik	knocking

pigdäm	inside
pili-pili	slippery
pitu-pitu	skiing
počo	hissing
poi-poi	flying around (of feathers)
pökč	cracking
po:lim	laughing until one falls
pölom, pölom	with a hole
pösok-pösok	the sound of female-deer's hoofs
pou-pou	dark (outside)
pukcem	till the belly distends (of eating)
pum-pum	sound of shaman tambourine
punäll, punärr	impression of the smoke from the top of the house
sagbam	immediately
sefe-sefe	rough, horny
sembe(l)-sembe(l)	like a sieve (holes)
sembele-sembele	immediately (to come)
sezeli-sezeli	shaggy
sezem	shaggy
sifall	very dusty
sim(u)-sim(u)	noiseless, quietly, silent
šöktoi	rushing
sopcom, sokcom	shaggy (of a beard)
sü'ak	grunt
suar-suar	sound of babbling water
tafa(ta)k	plump
tafu-tafu	through; soft
täk-täk, täŋ-täŋ	fast, hard, strong, tight
tak-tak	knocking
takčike	cracking
taŋci-taŋci	sound of hail falling on iron objects
tapči-tapči	full
tefu-tefu	swollen, soft
tegdim-tegdim	not tasty, with unpleasant smell
tembu-tembu	springy
teŋ-teŋ	just, exactly, in time, correct, straight
teu-teu	quite, silent
to:fo	plump
togo-togo	quiet (of water)
treks-teks	squeaking
tuŋmu-tuŋmu	shaking
xam	champing
xaŋna-xaŋna	dry

xaulum	entirely flooded
xei-xei	quiver, flutter
xeku-xeku	hop-hop
xuta-xuta	till red
waŋterl-waŋter, waŋtel-waŋtel	bow-legged
wekte-wekte	up to the top
weŋbek-weŋbek	waddling
zäka-zäka	growling much (of a dog)
zän-zäñann	aside (jumping)
zaŋa-zaŋa	ill in bed; laid up
zeŋge-zeŋge	staggering, shaking, swinging
zogbom-zogbom	hardly, with difficulty
zoŋgo-zoŋgo	naked
züle-züle	stripy

References

Avrorin, Valentin
    1959–1961 *Grammatika nanajskogo jazyka* [A grammar of Nanaj]. Volumes 1–2. Moscow, Leningrad: Akademija Nauk.

Avrorin, Valentin and Elena Lebedeva
    1978 *Oročskie texty i slovar'* [Oroch texts and dictionary]. Leningrad: Nauka.

Albert, Fridrich
    1956 *Die Waldmenschen Udehe: Forschungsreisen in Amur- und Ussurigebiet.* Darmstadt: Leske Verlag.

Arsen'ev, Vladimir
    1916 Etnologičeskie problemy na vostoke Sibiri [Ethnological problems in Eastern Siberia]. *Vestnik Azii* 2: 5–76.
    1947–1949 *Sočinenija* [Collected works]. Volumes 1–5. Vladivostok: Vladivostokskoe knižnoe izdatel'stvo.

Atknin, Vladimir and Al'bina Girfanova
    1985 Otricatel'nye formy glagola v udegejskom jazyke v sravnenii s drugimi tunguso-man'čžurskimi jazykami [The negative verbal forms in Udihe in comparison with other Tungus-Manchu languages]. *Lingvističeskie issledovanija* 1: 11–19.

Baicura, Uzbek
    1978–1979 Word intonation in Udehe according to instrumental-phonetic data. *Orientalia Suecana* 27–28: 108–117.
    1989–1991 The length of vowels and the tone movement in Udehe words according to some instrumental-phonetic data. *Orientalia Suecana* 38–39: 1–13.

Belikov, Vladimir and Elena Perexval'skaja
    1991 Kul'turnaja i jazykovaja assimiljacija narodov Primor'ja [The cultural and linguistic assimilation of the peoples of the Primorje region]. In: Nurul-Islam Džidalov (ed.), *Problemy jazykovogo kontaktirovanija v konkretnyx polièntničeskix regionax SSSR. Tezisy dokladov,* 51–52. Maxačkala: Akademija Nauk.
    1994 Tazov jazyk [The language of the Taz]. In: Vladimir Neroznak (ed.), 50–51.

Benzing, Johannes
    1956 *Die tungusischen Sprachen. Versuch einer vergleichenden Grammatik.* (Academie der Wissenschaften und der Literatur, Mainz. Abhandlungen der geistes- und sozial-wissenschaftlichen Klasse, 1955/11). Wiesbaden: F. Steiner.

Boldyrev, Boris

1976   *Kategorija kosvennoj prinadležnosti v tunguso-man'čžurskix jazykax*
        [The category of alienable possession in the Tungus-Manchu
        languages]. Moscow: Nauka.

1982   Forma kosvennogo obladanija v tunguso-man'čžurskix jazykax [The
        alienable possessive form in the Tungus-Manchu languages]. In:
        Elizaveta Ubrjatova (ed.), *Grammačeskie issledovanija po jazykam
        Sibiri*, 105–116. Novosibirsk: Nauka.

1987   *Slovoobrazovanie imen suščestvitelnyx v tunguso-man'čžurskix jazykax
        v sravnitel'no-istoričeskom osveščenii* [Noun formation in the Tungus-
        Manchu languages in its historical-comparative aspect]. Novosibirsk:
        Nauka.

Brailovskij, Semën

1901   Tazy ili Udihe. Opyt étnografičeskogo issledovanija [Taz or Udihe. An
        ethnographic study]. *Živaja starina* 1–4: 129–216, 323–433.

Bukatova, L.

1972   Dekorativno-prikladnoe iskusstvo naroda udege [The applied decorative
        art of the Udihe]. Unpublished Ph.D. dissertation, Moscow.

Čarušin, Evgenij

1935   *N'amahi buadu bihi buji* [Animals of the warm countries]. Leningrad:
        Detgiz.

Cincius, Vera

1949   *Sravnitel'naja fonetika tunguso-man'čžurskix jazykov* [The comparative
        phonetics of the Tungus-Manchu languages]. Leningrad: Učpedgiz.

1978   Central'nye i marginal'nye fonetičeskie arealy Priamur'ja i Primor'ja
        [The central and marginal phonetic areas of the Primorye and Amur
        regions]. In: Melitina Borodina (ed.), *Narody i jazyki Sibiri*, 59–66.
        Moscow: Nauka.

Cincius, Vera (ed.)

1975–1977 *Sravnitel'nyj slovar' tunguso-man'čžurskix jazykov* [A comparative
        dictionary of the Tungus-Manchu languages]. Volumes 1–2. Leningrad:
        Nauka.

Comrie, Bernard

1981   *The languages of the Soviet Union*. Cambridge: Cambridge University
        Press.

Doerfer, Gerhard

1978   Classification Problems of Tungus. In: Gerhard Doerfer and Michael
        Weiers (eds.), 1–26.

Gerhard Doerfer and Michael Weiers (eds.)

1978   *Tungusica*, Volume 1. Wiesbaden: Otto Harrassowitz.

Dolgix, Boris

1958   Etničeskij sostav i rasselenije narodov Amura v XVII v. po russkim

istočnikam [Ethnic belonging and the localization of the Amur peoples in the 17th century according to Russian sources]. In: Mixail Tixomirov (ed.), *Sbornik statej po istorii Dal'nego Vostoka*, 25–142. Moscow: Nauka.

Dunkaj, Nikolaj
1961   Priključenija Pakuly. Udegejskie skazki [The adventures of Pakula. Udihe tales]. *Dal'nij Vostok* 4: 120–124.

Girfanova, Al'bina
1984   O nekotoryx osobennostjax fonetiki udegejskogo jazyka [On some peculiarities of Udihe phonetics]. *Lingvističeskie issledovanija* 2: 88–93.
1985   Ob indikativnyx formax glagola v udegejskom jazyke [On Indicative verbal forms in Udihe]. *Lingvističeskie issledovanija* 1: 68–74.
1987   Optativ v udegejskom jazyke [The Optative in Udihe]. *Lingvističeskie issledovanija* 2: 26–31.
1988   Indikativnye formy glagola v udegejskom jazyke [Indicative verbal forms in Udihe]. UnpublishedPh.D. dissertation, Leningrad, Akademija Nauk.
1994   Udegejskij jazyk [The Udihe language]. In: Vladimir Neroznak (ed.), 57–58.
1997   Udegejskij jazyk. Problemy opisanija sovremennogo statusa [The Udihe language. Problems of the description of its modern status]. In: Dmitrij Nasilov (ed.), *Maločislennye narody Severa, Sibiri i Dal'nego Vostoka. Problemy soxranenija i razvitija jazykov*. 88–100. Saint Petersburg: Rossijskaja Akademija Nauk.

Hiu Lie
1978   Über die Benennungen der Udihe. Ein Beitrag zur historischen und ethnographischen Untersuchung über den Volksstamm Udihe. In: Gerhard Doerfer and Michael Weiers (eds.), 179–201.

Ikegami, Jirô
1974   Versuch einer Klassifikation der Tungussischen Sprachen. In: Gyorgy Hazai and Peter Zieme (eds.), *Sprache, Geschichte und Kultur der Altaischen Völker*, 271–272. Berlin: Akademie Verlag.

Jacobsen, William H.
1967   Switch-reference in Hokan-Coahuitecan, In: Dell H. Hymes and William E. Bittle (eds.), *Studies in Southwestern Ethnolinguistics: Meaning and History in the Languages of the American Southwest*, 238–263. The Hague, Paris: Mouton & Co.

Janhunen, Juha
1999   Tonogenesis in Northern Asia: Udeghe as a tone language. *Journal de la Société Finno-Ougrienne* 88: 31–38.

Kibrik, Aleksandr and Sandro Kodzasov
1990   *Sopostavitel'noe izučenie dagestanskix jazykov. Imja. Fonetika* [A

comparative study of Dagestanian languages. Noun. Phonetics].
Moscow: MGU.

Keenan, Edward
1985   Relative clauses, In: Timothy Shopen (ed.), *Language typology and
            syntactic description*. Volume 2. *Complex constructions*, 141–170.
            Cambridge: Cambridge University Press.

Kile, Nikolaj
1973.   *Obraznye slova nanajskogo jazyka* [Ideophones in Nanai]. Leningrad:
            Nauka.

Kimonko, Džansi
1955   Pesni oxotnika [The songs of a hunter]. In: *Tvorčestvo narodov Severa*.
            245–251. Leningrad.
1956   *Tam gde bežit Sukpaj* [Where the Sukpai flows]. Khabarovsk:
            Xabarovskoe knižnoe izdatel'stvo.

Kjalundzjuga, Valentina
1974   *Dva solnca. Udegejskie skazki* [Two sons. Udihe tales]. Khabarovsk:
            Xabarovskoe knižnoe izdatel'stvo.
1999   Udie Kejeweni on'oiti [A Udihe primer book]. Khabarovsk:
            Xabarovskoe knižnoe izdatel'stvo.

Kormušin, Igor'
1998   *Udyhejskij (udegejskij) jazyk: Materialy po ètnografii. Očerk fonetiki i
            grammatiki. Teksty i perevody. Slovar'* [The Udihe (Udeghe) language.
            Materials on the ethnic culture. A sketch of phonetics and grammar.
            Texts and translations. Glossary]. Moscow: Nauka

Krušanov, Andrej (ed.)
1989   *Istorija i kul'tura udegejcev* [The history and culture of the Udihe].
            Leningrad: Nauka.

Kulagin, Boris
1934.   *Baitawa zuzəuji jamu* [The court]. Leningrad: Detgiz.

Lambrecht, Knud
1994   *Information structure and sentence form: Topic, focus, and the mental
            representations of discourse referents*. Cambridge: Cambridge University
            Press.

Langacker, Ronald
1991   *Foundations of cognitive grammar*. Volume 2. Stanford: Stanford
            University Press.
1993   Reference-point constructions, *Cognitive Linguistics* 4: 1–38.

Lar'kin, Viktor
1958   *Udegejcy (istoriko-ètnografičeskij očerk s serediny XIX v. do našix dnej)*
            [The Udihe (an historical-ethnographical sketch from the mid
            nineteenth century until the present time)]. Vladivostok:
            Vladivostokskoe knižnoe izdatel'stvo.

Leontovič, Sergej
1896   *Kratkij russko-oročenskij slovar' s grammatičeskoj zametkoj* [A concise
            Russian-Orochon dictionary with grammatical notes]. Vladivostok.

Malchukov, Andrej
1995   *Even.* (Languages of the world/Materials 12.) München, Newcastle:
            Lincom Europa.

Margaritov, Vasilij
1888.   *Ob oročax Imperatorskoj gavani* [About the Oroch of the Emperor
            Haven]. Saint Petersburg: Izdatel'stvo Obščestva izučenija Amurskogo
            kraja.

McCarthy, Paul and Alan Prince
1995   Prosodic Morphology. In: John Goldsmith (ed.), *The Handbook of
            Phonological Theory*, 318–366. Cambridge: Blackwell.

Menges, Karl
1968   Die Sprache der Udihe. In: Wermer Fuchs (ed.) *Handbuck der
            Orientalistik.* Volume 5. *Altaistik.* Part 3. *Tungusologie*, 129–171.
            Leiden: E. J. Brill.
1978   Problems of Tungus Linguistics, *Anthropos* 73: 367–400.

Miller, Roy A.
1994.   The original geographic distribution of the Tungus languages. In:
            Howard I. Aronson (ed.), *Non-Slavic languages of the USSR. Papers
            from the Fourth Conference*, 272–297. Columbus, Ohio: Slavica
            Publishers, Inc.

Nadarov, I.
1887   Severo-Ussurijskij kraj [The Northern Ussuri area]. *Zapiski
            imperatorskogo Russkogo geografičeskogo obščestva* 17.

Nedjalkov, Igor'
1991   Zalog, vid, vremja v tunguso-man'čžurskix jazykax [Voice, aspect,
            tense in the Tungus-Manchu languages]. Unpublised Ph..D. dissertation,
            Saint Petersburg, Rossijskaja Akademija Nauk.

Neroznak, Vladimir (ed.)
1994   *Krasnaja kniga jazykov narodov Rossii. Ènciklopedičeskij slovar'-
            spravočnik.* [The Red Book of languages of Russia. Encyclopedic
            dictionary]. Moscow: Academia.

Nichols, Johanna
1980   Pidginization and foreigner talk: Chinese pidgin Russian, In: Elizabeth
            Traugott (ed.), *Papers from the 4th international conference on
            historical linguistics.* (Amsterdam studies in the theory and history of
            linguistic science, IV. Current Issues in Linguistic Theory, 14), 397–
            407. Amsterdam: John Benjamins B.V.
1986   The Bottom Line: Chinese Pidgin Russian. In: Wallace Chafe and
            Johanna Nichols (eds.), *Evidentiality: The linguistic coding of*

epistemology (Advances in discourse processes 30), 239–260.
Norwood, New Jersey: Ablekh Publishing Company.

Novikova, Klara
    1961   *Proekt edinoj fonetičeskoj transkripcii dlja tunguso-man' čžurskix*
        jazykov [A project towards a unified phonetic transcription for the
        Tungus-Manchu languages]. Moscow, Leningrad: Akademija Nauk.

Okladnikov, Aleksej and Anatolij Derevjanko
    1973   *Paleolit Amura* [The Paleaolith of the Amur region]. Novosibirsk:
        Nauka.

Osokina, E.
    1981   Udegejskoe iskusstvo v istoriko-ètnografičeskom aspekte (ornament,
        skul'ptura, sjužetnyj ploskostnyj risunok, vtoraja polovina XIX-seredina
        XX v.) [Udihe art in its historico-ethnographical aspect (ornament,
        sculpture, drawings, from the second half of the nineteenth century to
        the middle of the twentieth century]. Unpublished Ph.D. dissertation,
        Moscow.

Patkanov, Semën
    1906   Opyt geografii i statistiki tungusskix plemën Sibiri na osnovanii dannyx
        perepisi naselenija 1897 g. i drugix istočnikov [An attempt at the
        geography and statistics of the Tungus tribes in Siberia on the basis of
        the 1897 census]. St Petersburg: Imperatorskoe Russkoe geografičeskoe
        obščestvo po otdeleniju ètnografii.

Perexval'skaja, Elena
    1989   *Proekt udegejskoj školy* [A project of the Udihe school]. Moscow:
        Cultural Initiative.
    1991a   *Udegejskij jazyk. Kniga dlja učitelja* [The Udihe language. Teacher's
        book]. Moscow: Cultural Initiative.
    1991b   *Udegejskij jazyk. Materialy dlja pervogo klassa* [The Udihe language.
        Material for first grade children]. Moscow: Cultural Initiative.
    1991c   *Ila nim'aŋku* [Three tales]. Moscow: Cultural Initiative.
    1991d   *Ude oñoso azbukani* [An illustrated primer of Udihe]. Moscow: Cultural
        Initiative.
    1991e   Rezul'taty russko-udegejskix jazykovyx kontaktov [The results of
        Russian-Udihe linguistic contacts]. In: Anatolij Domašnev (ed.),
        Russkij jazyk i jazyki narodov Krajnego Severa. Tezisy dokladov, 56–58.
        Leningrad: Nauka.
    1991f   Sovremennaja udegejskaja antroponimija [Modern Udihe
        anthroponymy]. In: Leonid Alaev (ed.), *Vostok: prošloe i buduščee*
        narodov. Tezisy VI Vsesojuznoj konferencii vostokovedov 1, 104–107.
        Moscow: Nauka.
    1994   *Udegejcy.* [The Udihe]. Saint Petersburg: Prosveščenie.

Perexval'skaja, Elena and Marija Tol'skaja
    1991   *Udegejskij jazyk v detskom sadu* [The Udihe language in the nursery
        school]. Moscow: Cultural Initiative.

Pevnov, Aleksandr
1984   Otnošenie udegejskogo k drugim jazykam [The relationship of Udihe to
        other languages]. In: S. Pajčadze (ed.), *Arsen'evskie čtenija 7–8 aprelja
        1984 g.* Tezisy dokladov i soobščenij, 57–60. Khabarovsk.

Podmaskin, Vladimir
1977   Udegejskie toponimy [Udihe toponyms]. In: Jurij Sem (ed.), *Filologija
        narodov Dal'nego Vostoka (Onomastika),* 53–58. Vladivostok: DVO
        AN.
1987   Muzykal'nye instrumenty udegejcev [Musical instruments of the
        Udihe]. In: Nadežda Starkova, Svetlana Karabanova and L. Fetisova
        (eds.), *Nacional'nye tradicii v kul'ture narodov Dal'nego Vostoka,* 27–
        39. Vladivostok: DVO AN.
1989   Problemy ètnogeneza udegejcev [Problems of the ethnogenesis of the
        Udihe]. In: Svetlana Karabanova and L. Fetisova (eds.), *Problemy
        istoriko-kul'turnyx svjazej narodov Dal'nego Vostoka,* 72–79.
        Vladivostok: DVO AN.
1991   *Duxovnaja kul'tura udegeicev XIX-XX vv. Istoriko-ètnografičeskie
        očerki* [The spiritual culture of the Udihe in the nineteenth and twentieth
        centuries. A historical-anthropological sketch.] Vladivostok:
        Dal'nevostočnyj universitet.

Popova, Natalja
1933   *Arifmetika. Dǝluǝji skola tatusiŋkuni. Omoiti obo. Omoiti aŋandini
        tatusiuji* [Arithmetic for the primary school. First part. The first year].
        Leningrad: Učpedgiz.
1934   *Arifmetika. Dǝluǝji skola tatusiŋkuni. Gagda obo. Gagda aŋandini
        tatusiuji* [Arithmetic for the primary school. Second part. The second
        year]. Leningrad: Učpedgiz.

Protod'jakonov, Prokopij
1888   *Kratkij russko-oročonskij slovar'* [A concise Russian-Orochon
        dictionary]. Kazan': Izdatel'stvo Pravoslavnogo Missionerskogo
        obščestva.

Radčenko, Galina
1987   On pharyngealization in the Tungus-Manchu languages, In: Tomaz
        Gamkrelidze (ed), *Proceedings of the XIth International Congress of
        Phonetic Sciences, August 1–7, 1987.* Volume 5, 80–82. Tallinn.
1988   Spornye voprosy fonetiki udegejskogo jazyka [Debatable questions of
        Udihe phonetics]. In: Mixail Simonov and Aleksandr Anikin (eds.), 35–
        43.

Schirokogoroff, Sergej
1926   Northern Tungus migrations in the Far East, *Journal of the North-China
        Branch of the Royal Asiatic Society* 57: 123–183.

Schneider, Evgenij
1932   *Minti on'ofi. Boŋgo kniga udihezi on'owe tatusiuju* [Our ABC. A primer
        of Udihe]. Leningrad: Učperdgiz.
1934a   *V pomošč učitelju rabotaeščemu s bukvarëm "Minti on'ofi" (Naša*

gramota) [A companion book for a teacher using the primary book "Our ABC"]. Leningrad: Učpedgiz.

1934b   *Ob"jasnitel'naja zapiska k učebnikam arifmetiki dlja I i II klassa načal'noj školy.* [Explanatory notes for the arithmetic textbooks for the 1st and 2nd year of the primary school]. Leningrad: Učpedgiz.

1934c   *Taŋuji kniga. Dələuji skola tatusiŋkuni. Gagda oso. Gagda aŋadini tatusiuji* [A reading book for the second year of the primary school. Second part]. Leningrad: Učpedgiz.

1935a   *Sələmegə. Udihə nim'aŋkuni* [Selemege. Udihe tales]. Leningrad: Detgiz.

1935b   *Ob"jasnitel'naja zapiska i perevod k učebniku udejskogo jazyka* [Explanatory notes for the Udihe textbook]. Leningrad: Učpedgiz.

1935c   *Udihə kəhiəwəni tatusiŋku. Tənə dəluji skola tatusiŋkuni. Grammatika, on'ouji koli. Omoiti obo. Omoiti klassadu, gagda klassadu tatusiuji* [A textbook of the Udihe language, part 1, for the 1st and the 2nd classes of the primary school. Grammar and orthography]. Leningrad: Učpedgiz.

1936   *Kratkij udegejsko-russkij slovar'* [A concise Udihe-Russian dictionary]. Moscow, Leningrad: Učpedgiz.

1937   *Materialy po jazyku anjujskix ude* [Materials on the language of the Anyui Udihe]. Moscow, Leningrad.

1985   Materialy po jazyku anjujskix ude (fonetika, morfologija, leksika) [Materials on the language of the Anyui Udihe (phonetics, morphology, lexicon)]. In: Elizaveta Ubrjatova (ed.), *Lexika tunguso-man'čžurskix jazykov Sibiri*, 105–125. Novosibirsk: Akademija Nauk.

Schmidt, P.
1928   The language of Oroch, *Acta Universitatis Latviensis* 7: 17–62.

Schrenk, Leopol'd
1883–1903   *Ob inorodcax Amurskogo kraja* [About the aborigines of the Amur region]. Volumes 1–3. Saint Petersburg: Imperatorskaja Akadmija Nauk.

Sem, Lidija
1976   *Očerki dialektov nanajskogo jazyka. Bikinskij (ussurijskij) dialekt* [Dialects of Nanai. Bikin (Ussuri) dialect]. Leningrad: Nauka.

Šejkin, Jurij
1982a   *Udegejskie narodnye melodii (repertuarnyj sbornik)* [Udihe folk melodies (A collection of the repertoire)]. Vladivostok: Vladivostokskoe knižnoe izdatel'stvo.

1982b   Problema žanra v muzykal'nom fol'klore ude [The problem of genre in the musical folklore of the Udihe]. Ph.D. Dissertation, Leningrad.

Simonov, Mixail
1988   Fonologičeskaja sistema udegejskogo jazyka [The phonological system of Udihe]. In: Mixail Simonov and Aleksandr Anikin (eds.), 44–88.

Simonov, Mixail and Aleksandr Anikin (eds.).
1988   *Istoriko-tipologičeskie issledovanija po tunguso-man'čžurskim jazykam.* Novosibirsk: Akademija Nauk SSSR.

Simonov, Mixail and Valentina Kjalundzjuga

1998–1999 *A dictionary of the Udeghe (Udihe) language. Khor River Region Dialect.* Volumes 1–3. (International Institute of Ethnolinguistic and Oriental Studies Monograph Series 15). Stęszew: International Institute of Ethnolinguistic and Oriental Studies.

Simonov, Mixail, Valentina Kjalundzjuga and Marina Xasanova

1998 *Fol'klor udegejcev. Nimanku, telungu, jexe.* [The folklore of the Udihe. "Nimanku", "Telungu", "Jexe"]. (Pamjatniki fol'Ikora narodov Sibiri i dal'nego Vostoka). Novosibirsk: Sibiskoe Predprijatie RAN.

Smoljak, Aleksandr

1980 Problemy ètnogeneza tungusojazyčnyx narodov nižnego Amura i Saxalina [Problems of the ethnogenesis of the Tungus peoples of the lower Amur and Sakhalin]. In: Aleksandr Gurvič (ed.). *Ètnogenez narodov Severa*, 177–195. Moscow: Nauka.

1984 *Tradicionnoe xozjajstvo i material'naja kul'tura narodov nižnego Amura i Saxalina. Ètnogenetičeskij aspekt* [The traditional material culture of the peoples of the lower Amur and Sakhalin in its ethnogenetic aspect]. Moscow: Nauka.

Starcev, Anatolij

1996 *Material'naja kul'tura udegejcev (vtoraja polovina XIX–XX v.)* [The material culture of the Udihe (from the middle of the nineteenth century until the twentieth century]. Vladivostok: DVO RAN.

Sternberg, Lev

1933 *Giljaki, oroči, negidal'cy, ajny* [Giliak, Oroch, Neghidal and Ainu]. Khabarovsk: Dal'giz.

Sunik, Orest

1947 *Očerki po sintaksisu tunguso-man'čžurskix jazykov. Possessivnyj stroj predloženija* [Materials on the syntax of the Tungus-Manchu languages. The possessive structure of the sentence]. Leningrad: Akademija Nauk.

1962 *Glagol v tunguso-man'čžurskix jazykax* [The verb in the Tungus-Manchu languages]. Moscow, Leningrad: Akademija Nauk.

1968 Udegejskij jazyk [The Udihe language]. In: Viktor Vinogradov (ed.), *Jazyki narodov SSSR.* Volume 5. *Mongol'skie, tunguso-man'čžurskie i paleoaziatskie jazyki*, 210–232. Leningrad: Akademija Nauk.

1982 *Suščestvitel'noe v tunguso-man'čžurskix jazykax* [The noun in the Tungus-Manchu languages]. Leningrad: Nauka.

1997 Udegejskij jazyk [The Udihe language]. In: Viktorija Jarceva (ed.), *Jazyki mira. Mongol'skie jazyki. Tunguso-Man'čžurskie jazyki. Japonskij jazyk. Korejskij jazyk*, 236–248. Moscow: Indrik.

Taylor, John

1989 *Linguistic categorization: Prototypes in linguistic theory.* Oxford: Clarendon Press

Vasilevič, Glafira

1960 K voprosu o klassifikacii tunguso-man'čžurskix jazykov [On the

classification of the Tungus-Manchu languages]. *Voprosy Jazykoznanija* 2: 43–49.

Vovin, Aleksandr
   1993   Towards a new classification of Tungusic languages. *Eurasian Studies Yearbook* 65: 99–113.

Zinder, Lev
   1960   *Obščaja fonetika* [General phonetics]. Leningrad: Nauka.

Zulew, P.
   1933   *Taŋuji kniga. Omoiti obo. Omoiti aŋandini tatusiuju* [Reading book, part 1, the first year]. Leningrad: Učpedgiz.

Index

The index is intended to facilitate a quick search for the most important grammatical categories. Since the grammar in general makes great use of cross-references, one or two references in the index should be sufficient to find an item throughout the grammar. The book has fairly detailed section division reflected in the table of contents. Not to repeat it, in most cases we have only referred here to the major section where the corresponding item can be found.

Linguistic Typology

Following the founding of the *Association for Linguistic Typology* (ALT) in 1994, the launching of the journal *Linguistic Typology* under the auspices of ALT is another sign that typology is internationally consolidating its position.

Linguistic Typology aims to distinguish itself as a forum for the typological community, catering to its special professional needs. In particular, these concern the empirical dimensions of the typological enterprise and the ensuing demands to coordinate research and keep track of a profusion of data and results. Therefore *Linguistic Typology* specifically encourages informed dialogue and the proper recording of past and present achievements. Its content structure is diversified, comprising the following regular and occasional elements:

* articles with peer commentary, complementary articles, other interactive formats
* independent articles
* The Implications Register, documenting the implications on record, with known counter-examples, and gradually building up networks of registered implications
* Language Profiles and Family Portraits, from a typological viewpoint
* basic topical bibliographies

* The Present Perfect, featuring highlights from typology as done in the past but persisting into the present (hence this section's title)
* reviews, multiple reviews, book notices, literature surveys

Linguistic Typology is published in one volume of three issues per year with a total of approximately 400 pages.

Linguistic Typology online

Online access is now available to all institutional subscribers of the print version at no extra charge. To register for free online access or for more information, please contact us at wdg-info@deGruyter.de

New Publications from Mouton de Gruyter

Language, Text and Knowledge
Mental Models of Expert Communication
Edited by Lita Lundquist and Robert J. Jarvella

2000. 23 x 15,5 cm. VIII, 326 pages.
Cloth. DM 168,–/EUR 85,90/öS 1226,–/sFr 150,–/approx. US$ 84.00
• ISBN 3-11-016724-7 (Text, Translation, Computational Processing 2)

Casting light on the interplay between language and domain-specific knowledge, this new book brings together ideas and approaches from cognitive linguistics and psychology which aim at explaining how language works, and how people combine their knowledge from a variety of sources as they make sense of and draw inferences from text.

Evidentials
Turkic, Iranian and Neighboring Languages
Edited by Lars Johanson and Bo Utas

2000. 23 x 15,5 cm. Approx. 370 pages.
Cloth. DM 178,–/EUR 91,01/öS 1299,–/sFr 158,–/approx. US$ 89.00
• ISBN 3-11-016158-3 (Empirical Approaches to Language Typology 24)

This volume deals with the frequently misinterpreted evidential categories – grammaticalised expressions of subjective "experience" – found in the verbal systems of Turkic and Iranian languages as well as in some of their Slavic, Finno-Ugric, Tungusic, Caucasian and Armenian contact languages.

Prices are subject to change.