# The Linguistic Landscape of the Indian Himalayas 

Languages in Kinnaur

## Anju Saxena



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Languages in Kinnaur

## By

Anju Saxena


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## Notation, Terminology and Abbreviations

Phonological segments are written without any special delimiters and their status as phonemes or allophones is often left open, in order to present as undistorted a picture as possible of these linguistic systems, where the amount of empirical data to date is quite limited. As an exception to this, in a few cases in the phonology sections of the grammar sketches, phonetic variants are explicitly marked using surrounding square brackets. Further, in the transcriptions, optionality (free variation) is indicated with ordinary parentheses, e.g., Sangla Kinnauri (s)kad 'language' can be pronounced kad or skad, and Kinnauri Pahari $\operatorname{seb}(-e)$ [all(-EMP)] can occur with or without the $-e$ [-EMP] in the example where it appears. A special case is the notation "(-)" used with some grammatical items to indicate that their status as bound affixes (e.g., case endings), clitics or independent words (e.g., postpositions) is not clear (e.g., the $(-) r ə \eta$ comitative marker in Kinnauri). The boundary symbol "+" is used in some cases instead of "-" to indicate a compound boundary, i.e. a boundary between two lexical units combined in one word.

The abbreviations and grammatical glosses used are those of the Leipzig Glossing Rules ${ }^{1}$ as far as possible. My own additions and modifications to these used in the examples and in running text are preceded by "*" in the table below. In running text, glosses (corresponding to the middle line in the interlinear examples) are surrounded by square brackets and free translations (corresponding to the last line in the interlinear examples) are written in single quotes. Parentheses are used in the interlinear glosses for clarifications and added information, such as inferred words or phrases or explanations of literal glosses.

Small caps are used in the glosses of grammatical features and values, including the standard abbreviations listed in the table below, while labels for part-ofspeech, phrases, syntactic functions, etc., are written either with all caps (NP) or initial capital (Adj). Small caps are also used in Chapter 5 for the labels of the items in the lexical concept lists used in the comparative study reported there.

The notation " $a \sim b$ " expresses that there is (free) variation between $a$ and $b$, i.e., they are alternative ways of expressing the same thing. ${ }^{2}$ An expression on the form " $a: b$ " (or sometimes " $a / b$ ", especially in the case of affix allomorphy) says that there is some kind of relevant linguistic contrast-formal or

[^0]semantic—between $a$ and $b$, i.e., that they stand in some kind of paradigmatic opposition.

| * | Abbreviation | Feature |
| :---: | :---: | :---: |
|  | 1 | first person |
|  | 2 | second person |
|  | 3 | third person |
|  | A | agent-like argument of canonical transitive verb |
|  | AbL | ablative |
|  | Adj | adjective |
|  | Adv | adverb(ial) |
|  | AGR | subject agreement |
|  | ALL | allative |
| * | ana | anaphoric |
| * | ANIM | animate |
| * | ASP | aspect |
|  | AUX | auxiliary |
| * | C | consonant |
| * | CHRT | cohortative |
| * | CL | clause |
|  | CLF | classifier |
| * | CMP | comparative |
| * | CNT | count(able) |
| * | CNTR | contrastive specifier |
|  | сом | comitative |
| * | CONJ | conjunctive coordinator |
| * | CONT | contrast particle/marker ('than') |
|  | COP | copula |
| * | Crl | correlative |
|  | Dat | dative |
|  | DEF | definite |
|  | DEM | demonstrative |
| * | DIM | diminutive |
| * | DIR | direct knowledge |
| * | DISJ | disjunctive coordinator |
|  | DIST | distal |
| * | DSM | discourse marker/particle |
|  | DU | dual |


| * | DUI | dual inclusive |
| :---: | :---: | :---: |
| * | ECHO | echo word |
| * | EGO | egophoric actor |
| * | EMP | emphasis |
| * | ENA | egophoric non-agent |
|  | ERG | ergative |
|  | EXCL | exclusive |
| * | EXPL | expletive |
|  | F | feminine |
| * | FACT | factual (non-direct) knowledge |
|  | FOC | focus |
|  | FUT | future |
| * | GIVEN | given information |
| * | H | honorific |
| * | HI | high intentionality |
| * | HUM | human |
| * | IDX | index(ing) |
|  | IMP | imperative |
| * | i.name | proper name of individual (human, mythological, etc.) |
| * | INCH | inchoative |
|  | INCL | inclusive |
|  | INF | infinitive (= nominalizer used as citation form) |
|  | INS | instrumental |
|  | INTR | intransitive |
|  | IPFV | imperfective |
| * | LNK | linking element |
|  | LOC | locative |
|  | M | masculine |
| * | MDL | middle |
| * | MNR | manner |
| * | N, N | noun |
|  | N- | non- (e.g. NNOM non-nominative, NPST nonpast) |
|  | NEG | negation, negative |
| * | NH | non-honorific |
| * | NLC | connecting morph in numerals |
|  | NMLZ | nominalizer/nominalization |
|  | NOM | nominative |
| * | NOW | (result of witnessed) change of state/situation |
| * | NP | noun phrase |
| * | Num | numeral |


| * | NVIS | direct non-visual knowledge |
| :---: | :---: | :---: |
| * | O, o | object |
| * | P | phrase |
|  | PFV | perfective |
|  | PL, PL | plural |
| * | PLE | plural exclusive |
| * | PLI | plural inclusive |
| * | p.name | place name, geographical name |
|  | POSS | possessive |
|  | PROG | progressive |
|  | PROH | prohibitive |
|  | PROX | proximal/proximate |
|  | PRS | present |
|  | PST | past |
|  | PTCP | participle |
|  | Q | question marker |
|  | QUOT | quotative |
|  | RECP | reciprocal |
|  | REFL | reflexive |
|  | REL | relativizer/relative pronoun |
|  | RES | resultative |
|  | S | single argument of canonical intransitive verb |
| * | SAP | speech act participant (1st or 2nd person) |
|  | SG, SG | singular |
| * | SND | sound-imitating |
| * | SUBO | subordinator |
| * | SUP | superlative |
| * | TAE | tense/aspect/evidentiality |
| * | TERM | terminative |
| * | TNS | tense |
| * | TOO | 'too, also' |
|  | TR | transitive |
| * | V, v | verb |
| * | V | vowel |
| * | VIS | direct visual knowledge; visible |
| * | VOL | volitional |

# Introduction-Kinnaur: Geography, Demography and Languages 

## 1 <br> Introduction

This book is about Kinnaur, its languages and its people. At the same time, it is a contribution to the documentation of some aspects of the linguistic situation of a region-the Indian Himalayas-which so far has been very poorly described.

Historically, the linguistic scene of Kinnaur has been dominated by SinoTibetan languages. There are a number of Sino-Tibetan varieties spoken in the region, but exactly how these are interrelated has not been investigated in depth. The term "Kinnauri" is ambiguous; it may refer (at least) to a particular language, to a lower-level branch of Sino-Tibetan-spelled "Kinauri" in the Ethnologue (Eberhard et al. 2021) -or simply as an adjective referring to any language spoken in Kinnaur. For this reason, I will use the acronym "KST" (Sino-Tibetan of Kinnaur) as a cover term for the various Sino-Tibetan varieties spoken in Kinnaur, pending the more thorough investigation of their genealogical and areal relationships presented in Chapters 5 and 6 below, and the label "Kinnauri (language)" will be used only about the variety spoken in and around Sangla. ${ }^{1}$

One purpose of this book is to throw light on the relationship among the KST varieties, and another of my aims is to elucidate the extent and character of language contact in Kinnaur, primarily between the local KST and Indo-Aryan varieties, but also taking into consideration the greater Himalayan region. Two things are noteworthy:
(1) What little has been written earlier about the KST varieties has focused almost exclusively on what is known as (Standard) Kinnauri, spoken in Lower Kinnaur, while the KST varieties of other parts of Kinnaur have received much less attention. ${ }^{2}$
(2) There is next to no information available in the literature on Kinnauri

[^1]Pahari, the Indo-Aryan varieties spoken alongside the KST varieties in some parts of Kinnaur.
It is easy to come up with plausible reasons why this should be so: Lower Kinnaur is the region in Kinnaur which is relatively more accessible to outsiders, being closest to Shimla, the capital of Himachal Pradesh and the natural point of entry into the state from most parts of India. Also, because of the weather conditions, this region has been more accessible than Upper Kinnaur, which at least earlier used to be cut off from the rest of the world for longer or shorter periods during the winter season.

### 1.1 Linguistic Description, Language Documentation and Empirical Linguistics

The only reasonable way in which linguistics can advance as an empirical science involves as central activities collecting, analyzing and publishing as much and as diverse data as possible about languages and language communities throughout the world. As linguists, one of our primary goals is to find out what defines language as a general phenomenon. Linguistic universals proposed on the basis of a small genealogically and geographically limited set of languages can be no more than tentative and subject to revision in the face of more and more varied empirical language data (see, e.g., Evans and Levinson 2009).

This is closely connected to the rapidly expanding field of language documentation (or documentary linguistics; Himmelmann 1998; Gippert et al. 2006; Rau and Florey 2007; Grenoble and Furbee 2010; Austin and Sallabank 2011). On the face of it, language documentation has explicitly somewhat different goals from descriptive linguistics and language typology, for instance the goal of providing resources and tools for aiding in the preservation and revitalization of threatened languages. However, any conflict is more apparent than real; better language documentation cannot but result in better linguistic descriptions, which in turn make a better basis for the generalizations of language typology. Better linguistic descriptions and typological generalizations will also feed back into language documentation, for instance by uncovering "new" kinds of linguistic action and interaction that should be looked for and documented if found in a language.

The central characteristics of language documentation/documentary linguistics (see, e.g. Himmelmann 2006) have in fact long been embraced by field linguists as essential to their goal of faithful language description. Language documentation tends to emphasize methodology enabled by recent technical developments, such as video recording and widely shared digital linguistic databases, which obviously does not in any way stand in opposition to more traditional linguistic research.

Science by its very nature is empirical and cumulative, and arguably some of the central ideas of documentary linguistics simply flow from the recognition that a linguistics aspiring to the status of a science must be empirical and cumulative. These two requirements, then, imply many of the features that have been attributed to documentary linguistics. Empiricalness implies a focus on collecting primary data with the active involvement of the speech community, and cumulativeness implies that the primary and secondary data resulting from linguistic investigations be made available to the linguistic research community. In the present work, such data is made available in the form of a wealth of glossed examples to be found in the three language sketches (Chapters 24), in the vocabularies provided in appendices to the sketches, as well as in the detailed comparison tables presented in Appendix 5A in Chapter 5 .

## 2 <br> The Geography of Kinnaur

The topic of this book is the linguistic situation in one of the districts in the state of Himachal Pradesh in northern India. This district is referred to in Indian official documents as "Kinnaur" and its people as well as its main language as "Kinnauri". This section provides general background information on Kinnaur, its geography, administrative organization, demography and linguistic situation, including census data on bi- and multilingualism. This information is provided in order to place the linguistic situation in Kinnaur in its wider geographical and societal context.

Kinnaur is the third largest district of Himachal Pradesh. In older sources, the corresponding region goes under various names: "Kanaur" (Bailey 1909), "Kanawar" (Konow 1905), "Kunawar" (Fraser 1820; Cunningham 1844), "Koonawur" (Gerard 1841; Thornton 1862), "Kunawur" (Gerard 1842), and "Kinnaur" (Bajpai 1991). ${ }^{3}$ In a description of this region written in Hindi, the region is

3 Thomson (1852) describes some of the difficulties arising in transcribing foreign words, leading to situations where names are spelled variously by different persons: "The orthography of oriental proper names is a question of great difficulty, and grave objections may be urged against any system which has been proposed. If each European nation represents the sound of the vowels and variable consonants after the mode which prevails in its own language, then proper names must be translated, as it were, when rendered from one of these languages into another; whereas, if the mode of spelling the names remain fixed, then the value of the letters must be different in the majority of the languages from that which usually prevails. For purely popular purposes the former method would probably be the most judicious; and the English language has peculiar facilities for rendering oriental sounds, in consequence of its possessing the open sound of $u$, as in but, which is wanting in other European languages, though so common in Arabic, Persian, and Hindee, and all cognate tongues." (Thomson 1852: V).


FIGURE 1 Kinnaur and surrounding districts in Himachal Pradesh
referred to as "Kinnar" ("किन्नर"; B.R. Sharma 1976). Its major language, too, is called variously in different works: "Kanaawarii" (Konow 1905), "Kanawari" (Joshi 1909), "Kanauri" (Bailey 1908, 1909, 1910, 1911, 1920, 1938), "Kanooring skad" (Bailey 1909), "Kanooreanu skad" (Bailey 1909), and "Kinnauri" (D.D. Sharma 1988; Saxena 1992, 1995a, 1995b).

Kinnaur is located in the easternmost part of Himachal Pradesh (latitudes $31^{\circ} \mathrm{O} 5^{\prime} 50^{\prime \prime} \mathrm{N}$ to $32^{\circ} \mathrm{O} 5^{\prime} 15^{\prime \prime} \mathrm{N}$ and longitudes $77^{\circ} 45^{\prime}$ oo" E to $79^{\circ}$ oo' $\left.35^{\prime \prime} \mathrm{E}\right) .^{4}$ It borders on the autonomous region of Tibet in China in the east, on the Uttarkashi district of the Indian state of Uttarakhand in the south, the Shimla district in the southwest, the Lahaul and Spiti district in the north, and the Kullu district in the northwest. ${ }^{5}$ See Figure 1.

Kinnaur is a region of mountains and valleys, with altitudes ranging between 2,350 and 6,791 meters above sea level. There are three mountain ranges in this region: Zanskar, the Great Himalaya and the Dhauladhar mountain range. Zanskar forms a natural border between Kinnaur and the autonomous region of

4 Gerard (1841) provides somewhat different coordinates for Kinnaur. According to Gerard, the coordinates for Kinnaur were latitude $30^{\circ} 15^{\prime}$ to $32^{\circ} 4^{\prime}$, and longitude $77^{\circ} 50^{\prime}$ to $78^{\circ} 50^{\prime}$. It is, however, important to point out here that the organization of Kinnaur at that time was somewhat different from the present Kinnaur. For instance, during that time Kinnaur was part of Bashahr, and as a result of the administrative reorganization in 1960 fourteen villages which did not earlier belong to Kinnaur were made part of the Kinnaur district.
5 The districts of Shimla, Lahaul and Spiti, and Kullu belong to the state of Himachal Pradesh. The city of Shimla (Shimla district) is the capital of Himachal Pradesh.

figure 2 Lower, Middle and Upper Kinnaur
Tibet in China. The Great Himalaya runs through the district from the northwest to the southeast. Parts of the Dhauladhar range form the southern end of Kinnaur, merging finally with the Great Himalaya in the southeast. Beyond Kullu, Dhauladhar is known as the Pir Panjal mountain range. The mountain ranges in Kinnaur have peaks ranging in height between 5,190 and 6,791 meters above sea level. The highest peak in Kinnaur is Leo Pargail in the Zanskar. It is also the highest mountain in Himachal Pradesh. The Kinner Kailash mountain in the Greater Himalaya range which separates the Sangla valley (see the description below) from the Tidong valley, is the home of lord Shiva and Parvati according to a popular belief.

The district covers a total area of about $6,400 \mathrm{~km}^{2}$. Only about $3 \%$ of this area is populated; the remaining $97 \%$ consist of uninhabited and inaccessible mountainous terrain. The populated regions are generally in the river valleys.

Kinnaur is sometimes divided into three geographical regions based on their altitude: Lower Kinnaur, Middle Kinnaur and Upper Kinnaur (see the map in Figure 2). Lower Kinnaur extends from the southern border of Kinnaur to Kalpa (see Figure 2). This region includes the Nichar and Sangla valleys. Middle Kinnaur extends from Kalpa to Kanam, about midway between Kalpa and Nako. Upper Kinnaur is used to refer to the rest of Kinnaur.

Three rivers along with their tributaries run through Kinnaur: Satluj, Spiti and Baspa. Satluj runs through the entire district from the east to the west. Spiti flows through the Hangrang valley in Upper Kinnaur. At the village Khab (in the

Hangrang valley) it merges with the river Satluj. The Baspa river flows through the Sangla valley. It merges with the Satluj river at village Karcham. The same river or a tributary is sometimes called by different names in different regions. ${ }^{6}$

There are several valleys in this region. The valley of the river Satluj is approximately 140 km long, and like other valleys of the region, it is quite narrow. There is very little flat land in this valley-relatively more on the left (south) than on the right (north) bank. Villages such as Sungra, Nichar, Kilba, Pawari, Ribba, Morang and Nymgya are situated on the left river bank in this valley. Rupi, Chagaon, Urni, Kalpa, Kothi, Pangi, Rarang, Jangi, Kanam, and Poo are some of the villages on the right river bank. Mountains found in this valley include Taranda, Wangtu and Rogi.

The valley of the river Baspa is known as the Sangla valley after a major village of the valley. It has the largest flat area in the district with rich soil and pastures. The remotest village of this valley is Chitkul, situated south of the Chungsakhago pass.

The Ropa valley (also known as Syso, Shiaso, Shyasu, Chhiasu, Sangam or Sunam) is the valley of the Ropa stream, a tributary of the Satluj. It has very little forest, only some pines and birches. There are apple and apricot orchards and vineyards. Notable villages in this valley are Ropa, Giabong, Sangnam and Skyaso.

The Hangrang or Spiti valley is approximately 32 km in length. Its upper region is in the Lahaul and Spiti district. Spiti (also called Lee) is the important river of this valley. At the village Khab this valley joins the Satluj valley. The valley has a barren landscape, with very little area suitable for cultivation. Important villages in this valley are Sumra, Shyalkhar, Hango, Chuling, Nako, Chango, Malling and Lee. The Nako village is the highest populated spot in Kinnaur, at an altitude of 3,662 meters, and the Nako lake is the highest lake in Kinnaur.

Other valleys in the Kinnaur district include the Wangpo or Bhabha valley, the Gyanthang or Nesang valley, the Tejur or Leppa valley, the Kashang valley, the Mulgoon valley and the Yula valley.

The climate in Kinnaur varies depending partly on the elevation, location and direction of a valley. Generally speaking, Kinnaur has four seasons: Spring is usually between mid-March to mid-May, summer from mid-May to mid-

[^2]
figure 3 (Sub-)tahsils in Kinnaur
September, fall from mid-September to the end of November and winter from December to mid-March. In regions where there is rainfall, it rains in JulySeptember, though not as heavily as in the lower hills of Himachal Pradesh, outside Kinnaur. The rainfall decreases sharply from the southwest to the northeast and beyond Wangtu. Similarly, snowfall, too, varies in different regions in Kinnaur-it is least in the extreme southwestern region. The depth of the snow cover varies from about 0.5 m at higher altitudes to $1-1.5 \mathrm{~m}$ at $2,500 \mathrm{~m}$ above sea level. Snow usually falls from November and remains until April. Winds are hard from October onwards, their direction varying depending on the valleys, but it is generally from the west or southwest at altitudes of $5,000 \mathrm{~m}$, peaking in the late afternoon. Until recently, many parts of Kinnaur were physically cut off from the rest of the world for about half the year, as roads and paths became impassable in the winter season.

Kinnaur has two very different climatic zones, where the Sangla valley is characterized by wet weather, while on the northern side of the Great Himalayan range both the rainfall and vegetation decreases and one encounters a completely arid zone beyond Spello and Kanum.

Sangla and Nako form polar opposites in Kinnaur in more than one respect. Geographically Sangla is a verdant valley with lots of vegetation in the village and in the surrounding areas, whereas Nako is surrounded by an arid, barren, mountainous desert-like region. Both are very beautiful, although quite unlike each other. Similarly, the Sino-Tibetan languages of these two regions are also very different, as we will see in this volume.

Before the Indian independence in 1947 Kinnaur was administratively a part of the princely state of Bashahr (Riyasat Bashahr). It had the status of a tahsil (also written "tehsil" in English-language sources) -a traditional lower-level administrative unit. This term is still used about an administrative unit below the level of district in the present Indian administrative system. As the Chini village ${ }^{7}$ was the district capital of this tahsil, the Kinnaur tahsil itself was also known as the Chini tahsil. The Himachal Pradesh state (of which Kinnaur is now a part) was established on 15 April 1948 and Chini was made a tahsil of the Mahasu district in this newly established state. The present-day Kinnaur district was established on 1 May 1960, including in addition to the Chini tahsil 14 villages which previously had belonged to the Rampur tahsil.

This section presents an overview of the present administrative organization of the Kinnaur district. Much of the information provided here is based on the successive editions of the District census handbook from the censuses of 1971, 1981, 1991, 2001, and 2011 (see Figure 4). ${ }^{8}$

The district census handbooks have been published since 1951. Apart from the information about the population, these handbooks also provide information about other aspects of a district (e.g., language, level of education, gender distribution, available health, education and banking facilities). However, differences in the organization (including the information provided) of the various census handbooks, make it impossible in some cases to do a comparative study of a given factor across censuses.

The district headquarter of Kinnaur is Reckong Peo. Administratively the Kinnaur district has a three-level hierarchical organization. The district consists of three subdivisions, which in turn are organized into (sub-)tahsils (six in total in Kinnaur; see Table 1 and Figure 3), and at the lowest level each (sub-)tahsil consists of a number of villages. The organization and names of the various administrative units in the Kinnaur district are the same in all five census handbooks, except for one thing: Starting with the 1991 census handbook, the former subdivision is called community development block (C.D. Block).

[^3]
figure 4 The Kinnaur 1971 District Census Handbook

The definition of a village in all these four censuses is that of a "revenue village", that is, a unit (consisting of one or more physical villages) which has its own separate village budget account in the district administration. According to the 1971 and 1981 censuses, Kinnaur had a total of 77 villages (see Table 4).

The number of villages increased dramatically in the 1991 census, where the total number of inhabited villages ${ }^{9}$ increased to 228 . The number of inhabited villages in the 2011 census is 241 . This sharp increase in the number of villages

[^4]| Subdivisions (C.D. Block) | (Sub-)tahsils | No of villages |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1971/81 | 1991 | 2001 | 2011 |
| Nichar CDB |  |  | 85 |  | 85 |
|  | Nichar tahsil | 22 |  | 88 |  |
| Kalpa CDB |  |  | 63 |  | 75 |
|  | Kalpa tahsil | 12 |  | 38 |  |
|  | Sangla tahsil | 11 |  | 28 |  |
| Poo CDB |  |  | 80 |  | 81 |
|  | Morang tahsil | 12 |  | 38 |  |
|  | Poo tahsil | 12 |  | 27 |  |
|  | Hangrang sub-tahsil | 8 |  | 15 |  |
| Total in Kinnaur |  | 77 | 228 | 234 | 241 |

between the 1981 and the 1991 censuses is due partly to the fact that in the previous censuses villages which were located in difficult-to-reach remote locations were not taken into consideration, partly to major resettlement operations conducted during the period 1985-1987, and partly to changes made in determining how villages are defined for the purpose of the census.

Table 1 provides information about the administrative divisions of Kinnaur district and about the number of villages in each (sub-)tahsil, according to the District census handbooks.

## 4 Demography of Kinnaur

Since $97 \%$ of the total area of Kinnaur is uninhabitable, the average population density of the district is predictably low, around 13 persons $/ \mathrm{km}^{2}$ (see Table 2). The most densely inhabited regions in Kinnaur are located in the lower Satluj and Sangla valleys in Lower Kinnaur.

The two ethnolinguistic communities which have traditionally resided in this region are the KST and the Indo-Aryan community. The KST community is also known as Rajput, Kanet, and Khasia, and in this volume I will refer to
table 2 Population statistics for Kinnaur in some recent census reports

Census Total pop. Pop./km² Growth (\%) Kinnauri (\%) K. Pahari (\%) K+P (\%)

| 1971 | 49,835 | 7.8 | 21.61 | 68.41 | 19.40 | 87.81 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1981 | 59,547 | 9.3 | 19.49 | 74.87 | 10.63 | 85.50 |
| 1991 | 71,270 | 11.1 | 19.69 | 55.58 | 26.87 | 82.45 |
| 2001 | 78,334 | 12.2 | 9.91 | 72.00 | 10.00 | 82.00 |
| 2011 | 84,121 | 13.1 | 7.39 | 57.95 | 17.53 | 75.48 |

the Indo-Aryan community using the cover term Kinnauri Pahari. Traditionally the members of the KST community are agriculturalists and the Kinnauri Paharis farmworkers and artisans (e.g. ironsmiths, goldsmiths, carpenters, cobblers). According to the Indian Constitution (articles 341 and 342) the Kinnauri Pahari community is classified as a "scheduled caste" community and the KST community is classified as a "scheduled tribe". The whole district is classified as a tribal region. ${ }^{10}$

The population statistics for Kinnaur, as recorded in some recent census reports, are shown in Tables 2 and 3. Table 2 gives the proportions of the KST and Kinnauri Pahari populations as percentages of the total population of Kinnaur, and Table 3 provides a breakdown of the two population groups according to (sub-)tahsil. The percentages in the tables do not add up to $100 \%$, because apart from these two communites, there were also other groups (e.g., migrating workers) living in Kinnaur at the time the census surveys were conducted. As the focus here is on the KST and the Kinnauri Pahari communities and their languages, information is provided only about these two populations.

There are further sub-groupings within the two communities. The major sub-groups within the Kinnauri Pahari community are Chamang (also known as Koli), Domang (including Lohar 'ironsmith' and Ores 'carpenter') and Chanal. Traditionally Domangs prepare jewellery for gods and play musical instruments. Chanals live mostly in the Nichar region. Traditionally they are weavers,

10 Scheduled caste and scheduled tribe are official terms used in Indian legislation to refer to certain "disadvantaged and vulnerable" (Planning Commission 2008: 101) strata of the Indian population. Historically, the scheduled castes originate from the former "untouchables" in the traditional Hindu caste system, while scheduled tribes are constituted by (rural) ethnic minorities who were largely outside the Hindu religious system. The scheduled castes constitute $16 \%$ of the Indian population and the scheduled tribes make up $8 \%$ of the population (Planning Commission 2008, Chapter 6).
table 3 (Sub-)tahsil population figures ( $\mathrm{T}=$ total; $\mathrm{P}=$ Kinnauri Pahari; $\mathrm{K}=\mathrm{KST}$ )

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1971 | 1981 | 1991 | 2001 | 2011 |
| Nichar CDB | $T$ | 14,205 | 18,931 | 23,861 | 26,630 | 27,683 T |
|  | $P$ | (29\%) 4,170 | (13\%) 2,485 | (32\%) 7,553 | (13\%) 3,513 | (25\%) 6,998 P |
|  | K | (63\%) 8,922 | (69\%) 13,093 | (48\%) 11,339 | (64\%) 17,153 | (50\%) 13,933 K |
| Nichar | $T$ | 14,205 | 18,931 |  | 26,630 | 27,683 $T$ |
|  | $P$ | (29\%) 4,170 | (13\%) 2,485 |  | (13\%) 3,513 | (25\%) 6,998 P |
|  | K | (63\%) 8,922 | (69\%) 13,093 |  | (64\%) 17,153 | (50\%) 13,933 K |
| Kalpa CDB | $T$ | 19,217 | 22,184 | 26,137 | 29,361 | 33,232 $T$ |
|  | $P$ | (21\%) 4,123 | (12\%) 2,607 | (30\%) 7,828 | (8\%) 2,206 | (14\%) 4,647 P |
|  |  | (63\%) 12,168 | (72\%) 15,914 | (53\%) 13,800 | (76\%) 22,361 | (59\%) 19,475 K |
| Kalpa | $T$ | 10,789 | 12,730 |  | 17,630 | 19,190 $T$ |
|  | H | (24\%) 2,560 | (8\%) 1,037 |  | (8\%) 1,419 | (12\%) 2,299 H |
|  | K | (53\%) 5,734 | (68\%) 8,640 |  | (72\%) 12,651 | (58\%) 11,122 K |
| Sangla | $T$ | 8,428 | 9,454 |  | 11,731 | 14,042 $T$ |
|  | $P$ | (19\%) 1,563 | (17\%) 1,570 |  | (7\%) 787 | (17\%) 2,348 P |
|  | K | (76\%) 6,434 | (77\%) 7,274 |  | (83\%) 9,710 | (59\%) 8,353 K |
| Poo CDB | $T$ | 16,413 | 18,432 | 21,272 | 22,343 | 23,206 T |
|  | $P$ | (8\%) 1,376 | (7\%) 1,239 | (18\%) 3,772 | (9\%) 1,906 | (13\%) 3,105 P |
|  |  | (79\%) 12,999 | (84\%) 15,576 | (68\%) 14,470 | (75\%) 16,754 | (66\%) 15,338 K |
| Morang | $T$ | 7,447 | 8,784 |  | 10,383 | 10,238 $T$ |
|  | $P$ | (6\%) 475 | (7\%) 576 |  | (3\%) 326 | (10\%) 989 P |
|  | K | (87\%) 6,510 | (84\%) 7,391 |  | (80\%) 8,345 | (72\%) 7,368 K |
| Poo | $T$ | 5,841 | 6,254 |  | 7,898 | 8,309 T |
|  | $P$ | (14\%) 797 | (10\%) 644 |  | (16\%) 1,290 | (23\%) 1,925 P |
|  | K | (67\%) 3,913 | (81\%) 5,086 |  | (63\%) 4,942 | (49\%) 4,038 K |
| Hangrang | $T$ | 3,125 | 3,394 |  | 4,062 | 4,659 T |
|  | $P$ | (3\%) 104 | (1\%) 19 |  | (7\%) 290 | (4\%) 191 P |
|  |  | (82\%) 2,576* | (91\%) 3,099 |  | (85\%) 3,467 | (84\%) 3,932 K |

making baskets etc from nangal, a creeper (because of this the community is also called Nangalu). The traditional occupation of Chanals is working with leather. They reside throughout Kinnaur.

Within the KST community too, there is some further sub-classification (referred to as khel or khandana). The sub-classification system is, however,
table 4 Kinnauri Pahari population village-wise in each (sub-)tahsil according to the 1981 census handbook

|  | None | 0-10\% | 11-20\% | 21-30\% | $31+\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nichar | Bara Khamba, Chauhra, Chhota Khamba, Garsun, Kandar, Natpa, Miru, Paunda, Punang, Ramni, Yula | Bari, Chagaon, Jani, Kangos, Sungra, Taranda, Urni |  | Nichar | Bhabha, Panwi |
| Kalpa | Mehbar | Arrang, Duni, Khawangi, Kothi, Pangi, Rogi, Telangi, Yuwarangi | Kalpa | Purbani | Pawari |
| Sangla | Batseri (Bosering), Chasu, Shaung | Kamru, Kanahi, Sangla | Chitkul, Rakchham |  | Barua, Sapni, Kilba |
| Morang | Asrang, Nesang, Rispa | Akpa, Charang, Jangi, Kuno, Lippa, Morang, Thangi | Rarang, Ribba |  |  |
| Poo | Dabling, Khab, Ropa, Rushkalang, Sannam, Shyaso | Giahong, Namgia, Poo | Spilo | Labrang | Kanam |
| Hangrang | Chango, Hango, Loo, Shialkar, Sumra | Chuling, Malling, Nako |  |  |  |

neither equally widespread nor equally prominent throughout Kinnaur. It is more visible in Lower and Middle Kinnaur than in Upper Kinnaur.

Similarly, the social roles of the KST community and Kinnauri Paharis in village life are more well-defined and more fixed in Lower and Middle Kinnaur than in Upper Kinnaur. For example, in Lower and Middle Kinnaur only the Kinnauri Paharis function as drumbeaters during festivals in the procession of the village god and are responsible for certain chores in the temple, whereas in Upper Kinnaur (e.g. in the Nako village), if no Kinnauri Paharis are available, members of the KST community will take care of these duties. ${ }^{11}$

In line with this, as we will see in Chapter 4, the Kinnauri Pahari community speaks a local Indo-Aryan (Western Pahari) language in Lower and Middle Kinnaur, while the corresponding groups in Upper Kinnaur speak the local KST variety, even though the two groups (KST and Kinnauri Paharis) maintain their separate social group identities throughout Kinnaur, including Upper Kinnaur.

As Tables 2 and 3 show, in terms of the population size the KST community is much larger than the Kinnauri Pahari community. This difference in the size of the two communities can also be seen in Table 4, which presents the Kinnauri Pahari proportion of the population at the village level.

[^5]TABLE 5 Proportion of the Kinnauri Pahari $(\mathrm{KP})^{12}$ population to the total population in villages according to the 1981 and 1991 census handbooks

|  | 1981 |  | 1991 |  |
| :--- | ---: | ---: | ---: | ---: |
| \% KP | No. of villages | \% of villages | No. of villages | \% of villages |
| 0 | 29 | 37.66 | 64 | 28.07 |
| $\mathbf{1 - 5}$ | 26 | 33.77 | 23 | 10.09 |
| $6-10$ | 5 | 6.49 | 18 | 7.89 |
| $\mathbf{1 1 - 1 5}$ | 2 | 2.60 | 17 | 7.46 |
| $\mathbf{1 6 - 2 0}$ | 5 | 6.49 | $\mathbf{1 2}$ | 5.26 |
| $\mathbf{2 1 - 3 0}$ | 3 | 3.90 | 28 | 12.28 |
| 31- | 7 | 9.09 | 66 | 28.95 |
| District | 77 | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{2 2 8}$ | $\mathbf{1 0 0 . 0 0}$ |

Unlike the 1971 census handbook, the 1981 handbook also provides information about the distribution of the Kinnauri Pahari and KST population village-wise. The data in Table 4 from the 1981 census handbook show that while there are some villages (e.g., Sumra, Shialkar, Chango, Loo and Hango in the Hangrang sub-tahsil) which lack a Kinnauri Pahari population completely, there is no village in the Kinnaur district which lacks a KST population completely. Further, there is no village in this census report which has a predominantly Kinnauri Pahari community. In $40 \%$ of the villages ( 31 out of 77 villages) the Kinnauri Pahari community is relatively small ( $1-10 \%$ ).

Tables 5 and 6 show summary data from the 1981 and 1991 census handbooks on the proportion of Kinnauri Paharis (Table 5 ) and the KST population (Table 6 ) in villages in Kinnaur. As mentioned earlier, villages are not defined in the same way in the two censuses.

To summarize, according to the most recent census reports the KST community is comparatively larger than the Kinnauri Pahari community. From Tables 2, 3, 5 and 6 a downward trend in the size of the Kinnauri Pahari community is evident. At the same time, even though the Kinnauri community is relatively much larger than the Kinnauri Pahari community and relatively stable in terms of its proportion of the population as a whole, the information

[^6]table 6 Proportion of the KST population to the total population in villages according to the 1981 and 1991 census handbooks

|  | 1981 |  | 1991 |  |
| :--- | :---: | :---: | :---: | :---: |
| \% KST | No. of villages | \% of villages | No. of villages | \% of villages |
| 0 | 0 | 0 | 15 | 6.58 |
| $\mathbf{1 - 5}$ | 0 | 0 | 4 | 1.75 |
| $6-15$ | 0 | 0 | 8 | 3.51 |
| $16-25$ | 0 | 0 | 10 | 4.39 |
| $26-35$ | 1 | 1.30 | 18 | 7.89 |
| $36-50$ | 8 | 10.39 | 25 | 10.97 |
| 51 and above | 68 | 88.31 | 148 | 64.91 |
| District | 77 | $\mathbf{1 0 o . o o}$ | $\mathbf{2 2 8}$ | $\mathbf{1 0 0 . 0 0}$ |

available in the census reports about the prevailing language attitudes towards the Kinnauri language in Kinnaur raises some concern about the stability of the Kinnauri language. See Section 5.1 for details.

The focus in this section has been on the KST and the Kinnauri Pahari communities-the two indigenous communities of Kinnaur. The focus in the following section will be on the language(s) of Kinnaur, based on the census reports.

## 5 Number of KST Speakers

One special feature of the Indian census reports is that they also provide some information about languages. This section presents information about the number of the speakers of the Kinnauri language, ${ }^{13}$ based on the four census reports examined here. Since Indian census information is ultimately based on self-reporting, and since the tabulation of census figures is complex and nontransparent, the information provided here should be taken as indicative only.

The Indian census reports mention explicitly only those languages which have 10,000 or more speakers. Languages with fewer than 10,000 speakers

[^7]TABLE 7 The number of Kinnauri speakers in five census reports

## No. of speakers Increase (\%)

| 1971 | 45,472 | - |
| :--- | ---: | ---: |
| 1981 | 52,864 | 16.26 |
| 1991 | 61,794 | 16.89 |
| 2001 | 65,097 | $5 \cdot 35$ |
| 2011 | 83,827 | 28.36 |

are lumped together into a general category, referred to as "other". Kinnauri is the only language of Kinnaur which is mentioned explicitly in the census reports. Kinnauri Pahari-the Indo-Aryan language of the Kinnauri Pahari community-is not mentioned in the census reports, apparently because it has fewer than 10,000 speakers. According to the Ethnologue (Eberhard et al. 2021), Kinnauri Pahari (referred to as "Kinnauri, Pahari") has 6,330 speakers (1998).

Table 7 presents the number of individuals who claimed Kinnauri as their mother tongue in the five censuses 1971-2011. ${ }^{14}$ The table also shows the decadal percentage increase in the number of Kinnauri speakers. It is noteworthy that the number of Kinnauri speakers is greater than the Kinnauri (ST) population in Kinnaur. This is most likely both because the Kinnauri Pahari population also report themselves as Kinnauri speakers first (and Hindi speakers second) and because many Kinnauri speakers live outside Kinnaur (the figures in Table 7 are all-India counts).

### 5.1 What the Census Figures Tell Us about the Status of KST

The Indian census reports also provide some information about multilingualism, in particular, information about the number of speakers who consider themselves monolinguals, bilinguals and trilinguals (including in which languages). Table 8 reproduces multilingualism data from the document ST-17: Mother tongue, bilingualism and trilingualism-for scheduled tribes from the 1991 census, which show some interesting trends concerning language attitudes in Kinnaur.

[^8]table 8 Bilingualism statistics for Kinnaur (1991 census)

| Second language | Kinnauri speakers | Hindi speakers | Bhotia speakers |
| :--- | :---: | :---: | :---: |
| Kinnauri | - | 8 |  |
| Hindi | 24,103 | - | 20 |
| Tibetan | 63 | 4 |  |
| English | 50 | 94 |  |
| Bhotia | 47 |  |  |
| Urdu | 15 |  |  |
| Bodo/Boro | 1 |  |  |
| Malto | 1 |  |  |
| Nepali | 1 |  |  |
| Punjabi | 1 |  | 20 |
| Other languages | 59 |  | 8 |
|  |  |  |  |
| Sum (bilinguals) | 24,341 | 256 | 28 |
| Monolinguals | 14,545 | 364 |  |
| Total | 38,886 |  |  |

As the data in Table 8 illustrate, an overwhelming majority of Kinnauri speakers claimed that they were bilinguals (including trilinguals). ${ }^{15}$ The document mentions ten languages explicitly by name (provided in decreasing order by number of speakers in the table), plus an "other languages" category, which the Kinnauri speakers have provided as their second language. As is clearly seen here, a very large number of Kinnauri speakers claimed Hindi as their second language.

Quite distinct from this, only a very small percentage of the Hindi speakers residing in Kinnaur at the time of census provided Kinnauri as their second language. According to the census data, the total number of Hindi speakers residing in Kinnaur was 364, out of which 108 claimed to be bilingual (including trilingual). As shown in Table 8, only 8 out of these 108 Hindi speakers provided Kinnauri as their second or third language. Interestingly, 6 out of these 8 were female.

[^9]In the same vein, among the Bhotia ${ }^{16}$ speakers residing in Kinnaur- 28 individuals in total in the 1991 census- 20 claimed to be bilingual (including trilingual), and all 20 claimed Hindi (and not Kinnauri) as their second language. Similar trends can be seen concerning the choice of third language. Of the Bhotia speakers, 7 individuals claimed that they were trilinguals- 6 out of which reported English as their third language and 1 claimed a language under the category "other". In sum, not even one of them indicated Kinnauri-the largest local language of this region, as their second or third language.

These examples clearly show the unidirectionality in bilingualism-while most Kinnauris claim to speak Hindi, non-Kinnauri populations living in Kinnaur do not claim to speak Kinnauri, a case in point being Tibetan and Lahauli speakers-these languages are spoken in the neighboring regions or even in Kinnaur, but speakers of these languages did not provide Kinnauri as their second or third language, reporting instead Hindi and English.

Another interesting observation concerns the prevalence of bilingualism and gender. Bilingualism is more prevalent among the male population than the female population. This is the case both among those who have indicated Kinnauri as their first language as well as other those who indicated some other language as their first language. Clear exceptions were Hindi speakers who reported Kinnauri as their second language ( 2 men as against 6 women) and Kinnauri speakers who claimed Bhotia as their second language ( 15 men vs. 32 women). An approximately equal proportion of men and women was seen among Kinnauri speakers who claimed a language belonging to the "other" language category as their second language ( 27 men vs. 32 women), Punjabi speakers who claimed Hindi to be their second language ( 5 men vs. 8 women), or Kinnauri as their second language (1 man, 3 women), Kinnauri speakers who claimed Tibetan as their second language ( 33 men, 30 women), and Sherpa speakers who claimed Nepali as their second language ( 2 men, 2 women). In all other cases bilingualism was more prevalent among men as compared to women. The exceptional cases noted here could be a result of intermarriages, with women learning the language of the household.

16 Bhotia is the language label provided in the census data. The Ethnologue lists "Bhotia/Bhotea" as one of the alternative names for 13 languages, mostly Tibetic, including a language indigenous to Kinnaur, Bhoti Kinnauri (nes), i.e. Navakat (see Chapter 3).

## 6 Some Questions to Be Addressed in This Work

To summarize, in terms of the population size of the Kinnauri Pahari and the KST communities, the latter community is larger. Similarly, in terms of the number of speakers, Kinnauri has a larger number of speakers than Kinnauri Pahari. However, it is important to note that even though the total number of Kinnauri speakers and the KST community are showing a positive trend-a growth in numbers over the four census reports-the degree of bilingualism among the Kinnauri speakers and the low interest among non-Kinnauri speakers in using Kinnauri as a second language are noteworthy.

Plausibly this is indicative of the diminishing dominance of the traditionally locally dominant language-Kinnauri-in favor of larger, more globally dominant language(s) -Hindi and English. Further, in the census reports Kinnauri is presented as one language. If however more than one KST variety is subsumed under this label, and if the KST varieties in fact are different enough, this may stimulate the use of a widely known lingua franca such as Hindi even among KST speakers.

A lack of comparative linguistic analyses of the KST varieties makes it difficult to discern if what is labelled as the Kinnauri language in the census reports is indeed to be considered one language linguistically. This is in no small part due to the fact that all the KST varieties are poorly described. ${ }^{17}$ The present monograph endeavors to fill this gap in our knowledge, and it also aspires to provide a better overview of the whole language ecology of Kinnaur, which also includes the local Indo-Aryan varieties. For reasons of space, the focus will be on the traditional languages of Kinnaur, while the more recent incursions of Hindi and English regrettably must be left out of the present investigation.

To start addressing these questions, Chapters 2 and 3 provide linguistic sketches of two of the KST varieties, selected from the geographical extremes of Lower Kinnaur (the Sangla village in the southernmost part of Kinnaur)Kinnauri (Chapter 2) —and Upper Kinnaur (the Nako village in the northernmost part of Kinnaur)—Navakat (Chapter 3). Chapter 4 contains a similar linguistic sketch of Kinnauri Pahari (Indo-Aryan). All three sketches are based on primary fieldwork data that I have collected over many years.

In Chapter 5, the genealogical relationships among the KST varieties are investigated using a computational methodology inspired by lexicostatistics, followed by a comparison between Kinnauri and Navakat based on the linguistic sketches presented in Chapters 2 and 3 . Chapter 6 addresses the question of language contact between Kinnauri and Kinnauri Pahari.

17 But see Huber's (2014a, 2014b, 2019) work on Shumcho and Martinez's (2021) PhD dissertation on Chhitkuli.

## A Linguistic Sketch of Kinnauri

## 1 <br> Introduction

Kinnauri is subsumed under what is usually referred to as (Standard) Kinnauri in the literature, the Sino-Tibetan (ST) language of Lower Kinnaur. In older literature it is referred to as "Milchan" (Gerard 1841), "Milch(an)ang" (Konow 1909), "Malhasti" (Konow 1909), "Kunawar" (Gerard 1842), "Kanaawarii" (Konow 1905), "(Lower) Kanauri" (Bailey 1908, 1909, 1910, 1911, 1920, 1938), "Kanooringskad" "Kanooreanu skad" (Bailey 1909) and "Kanáwarí" (Joshi 1909). In more recent works the term "Kinnauri" is used to refer to this ST variety (D.D. Sharma 1988; Saxena 1995a, 1995b, 1997b, 2000a, 2000b, 2004, 2007, 2017). According to Ethnologue (Eberhard et al. 2021), its genealogical classification is as follows: Sino-Tibetan > Tibeto-Burman > Western Tibeto-Burman > Bodish > West Himalayish > Kinauri > Kinnauri. The classification according to Glottolog (Hammarström et al. 2020) is: Sino-Tibetan > Bodic > West Himalayish > Western West Himalayish > Kinnauric > Kinnauri.

Chapter 1 provided basic socio-cultural and geographical information on Kinnaur (including Lower Kinnaur). As this region is rather large, with some linguistic differences attributed to regional differences (Bailey 1909, 1920; D.D. Sharma 1988; see also Chapter 5 below), the focus here is on the Kinnauri variety spoken in the Sangla tahsil. The Sangla tahsil belongs administratively to the Kalpa CDB in the Kinnaur district (see Chapter 1). According to the 2011 Indian census, Sangla tahsil has 36 villages (e.g. Kilba Khas, Kanahi, Sapni Khas, Baturi, Barua Khas, Chasu Khas, Kamru Khas, Sangla, Batseri, Rakchham and Chitkul). ${ }^{1}$ With the exception of Rakchham and Chitkul, the ST speech of these villages is very similar, with a high degree of mutual intelligibility (cf. the results presented in Chapter 5).

As members of these villages interact actively (e.g. marriages among the members of different villages is commonplace), it is not always possible to determine the exact characteristics of the speech of a particular village. For this reason, the linguistic variety described in this chapter reflects the speech

[^10]of the ST community of the Sangla tahsil, with the exception of Rakchham and Chitkul. This variety is referred to as Kinnauri here. ${ }^{2}$

The analysis presented in this chapter represents primarily the speech of Brua and Sangla villages, although some observations are also made concerning Kinnauri of other regions (Lower and Middle Kinnaur). This includes the speech of both older and younger speakers, formally educated and those who did not receive formal education. Our most senior consultant Mrs Jwala Sukhi Negi never left Kinnaur except for some visits to Shimla, the capital city of Himachal Pradesh for health checkups etc. She could understand and speak some Hindi. Similarly, Mrs Krishan Bhagti did not receive formal education. She was born, grew up and still lives in the Sangla region. Among young adult speakers the analysis represents primarily the speech of Santosh Negi (Brua, married to a person from Sangla), Chetan Negi (Sangla) and Priya Negi (Sangla).

## 2 Phonology

### 2.1 Consonants

The consonant phonemes of Kinnauri are shown in Table 9 and examples of contrasting minimal pairs are given below. The aspirated consonants have comparatively lower degree of aspiration than in many IA languages. The voiced palatal nasal $n$ is rather infrequent in our material. There is, however, a minimal pair found: $-n[-2$ SG.H] : $-n[-2$ SG.NH].
table 9 Consonant phonemes in Kinnauri

|  | Bilabial Alveolar Palatoalveolar Palatal Retroflex Velar Glottal |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stop | pb | td |  |  | t d |  |  |
| Aspirated stop | $\mathrm{p}^{\text {h }}$ | $\mathrm{t}^{\text {h }}$ |  |  | $\mathrm{t}^{\text {h }}$ | $\mathrm{k}^{\text {b }}$ |  |
| Fricative |  | s | $\int$ |  |  |  |  |
| Affricate |  | ts dz | t ${ }^{\text {d }}$ |  |  |  |  |
| Aspirated affricate |  | ts ${ }^{\text {h }}$ | $\mathrm{t}^{\text {h }}$ |  |  |  |  |
| Nasal | m | n |  | n |  | ๆ |  |
| Lateral |  | 1 |  |  |  |  |  |
| Trill |  | r |  |  |  |  |  |
| Approximant | $\mathrm{v}^{2}$ |  |  | j |  |  |  |

Minimal (or near-minimal) pairs: Consonants

| $\mathrm{p}: \mathrm{b}$ | pay | 'lineage' | bay | 'foot, leg' |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{p}: \mathrm{p}^{\text {h }}$ | pja | 'bird' | $p^{h} j a$ : | 'forehead' |
| t : d | tammu | 'to smell (TR)' | dammи | 'to roast (TR)' |
| $\mathrm{t}: \mathrm{t}^{\text {h }}$ | taŋmи | 'to observe' | $t^{h} a n n u$ | 'to drop (TR)' |
| $\mathrm{t}: \mathrm{t}$ | tиути | 'to drink' | tuøти | 'to plant, to stand (TR)' |
| $t: d$ | tanay | 'shelf' | da:nay | 'punishment' |
| $\mathrm{t}^{\mathrm{h}}: \mathrm{t}^{\text {h }}$ | $t^{h} u g$ | 'at, above' | $t^{h} o g$ | 'white' |
| $t: t^{\text {h }}$ | botay | 'soybean-like seeds' | boithay | 'tree' |
| $\mathrm{k}: \mathrm{k}^{\text {h }}$ | ka | [2SG.NH] | $k^{h} a$ | 'shit' |
| k: g | kud | [call.IMP] | gud | 'hand, arm' |
| k: g | rak | 'an alcoholic beverage' | rag | 'stone, rock' |
| k: g | kar | 'tax' | gar | 'tooth' |
| d: d | dam | 'good' | dam | 'a kind of cattle shed' |
| $\mathrm{h}: \mathrm{k}^{\mathrm{h}}$ | hoy | 'insect' | $k^{h} O \eta$ | [bend.Imp] |
| s: $\int$ | sa | [kill.PST] | fa | 'meat, flesh' |
| $\mathrm{s}: \mathrm{h}$ | se: | [CNTR.F] | he | 'again' |
| t: ts | to | [COP], [AUX] | tso | 'thorn' |
| tf: d3 | tabmu | 'to pull down (TR)' | dzabmu | 'to come down' |
| t: $\int$ | til | 'grass' | fi | 'leaf compost' |
| tf: $\mathrm{f}^{\text {h }}$ | tu | 'word' | $t^{h} u$ | 'why' |
| $\mathrm{t}^{\mathrm{h}}: \mathrm{t}^{\text {h }}$ | $t^{\text {h }}$ is | 'soft, loose' | $t^{\text {his }}$ | 'join' |
| ts: $\mathrm{ts}^{\text {h }}$ | tsam | 'wool' | ts ${ }^{\text {a }}$ am | 'ladder' |
| s: d | say | 'a kind of kindling wood' | dzay | 'gold' |
| s: d | sod | 'brahmin priest' | dzod | 'wheat' |
| s: d | tsis | 'rotten' | tsi:dz | 'thing' |
| ts: t | tsu: | 'cough (N)' | tu | 'soot; word' |
| d: d3 | $d u$ | [COP], [AUX] | dsu | 'cloud' |
| m : n | ba:m | 'a kind of drum' | bain | 'bow' |
| $\mathrm{b}: \mathrm{m}$ | bal | 'head, top' | mail | 'wealth' |
| m: n | gompa | 'leg' | gonpa | 'Buddhist temple' |
| n : d | no | [3SG.DIST.VIS] | do | [3SG.DIST.NVIS] |
| n : $\mathrm{\eta}$ | rin | 'ell, cubit' | ray | [tell.1/20.IMP] |
| $\mathrm{n}: \mathrm{\eta}$ | an | [3SG.ANA] | $a \eta$ | [1SG.NNOM] |
| n : n | -n | [-2SG.NH] | -n | [-2SG.H] |

[^11]| $\mathrm{r}: \mathrm{l}$ | ray | ＇horse＇ | lan | ＇cow＇ |
| :--- | :--- | :--- | :--- | :--- |
| $\mathrm{l}: \mathrm{n}$ | val | ＇much，many＇ | van | ＇steam＇ |
| $\mathrm{v}: \mathrm{j}$ | van | ＇steam＇ | jay | ＇flea＇ |
| $\mathrm{b}: \mathrm{v}$ | bal | ＇head，top＇ | val | ＇much，many＇ |

2．1．1 Consonant Allophony and Variation
$d$ has two allophones：［d］and［r］，where［r］occurs intervocalically and［d］ occurs elsewhere．For example：

| ［djori］ | ＇pair＇ | ［maldogay］ | ＇life＇ |
| :--- | :--- | :--- | :--- |
| $[$ gəri］ | ＇clock＇ | $[$ kunda $]$ | ＇statue（of god）＇ |
| $[\mathrm{refu}]$ | ＇radio＇ | ［dabmu］ | ＇to pull＇ |
| $[$ morəlo $]$ | ＇limbless＇ | ［buldjaimu］ | ＇to roast，fry＇ |
| $[$ goragari］ | ＇horse carriage＇ | ［dig］ | ＇pot＇ |

The only apparent exceptions to this complementary distribution principle are ［dudu］＇owl＇and［thã：di］＇cold＇．In both these examples there is a clear［d］inter－ vocalically．But the prosody of these words diverges from the default prosody of Kinnauri words．In these words either there is a pause between the first and the second syllable（［＇du．du］），or the vowel of the first syllable is long（［thã：di］）．It is plausible that［dudu］might perhaps be an onomotopoeic reduplicated form．${ }^{4}$

Variation is also found in the phonetic realization of $\int$ ．The allophones are［ $\left.\int\right]$ and［s］．According to Takahashi（2001：104），［s］occurs before back vowels and ［J］occurs elsewhere．In our material the younger consultants from Sangla use ［J］everywhere（e．g．，［ $\int$ Jonferes］＇Saturday＇）．Both［J］and［s］occur in the speech of the older female speaker from Brua，but without any systematic distribution． In her speech both［ $\left.\int\right]$ and［s］occur with both front and back vowels．For exam－ ple，［soso］＇ripen＇，［profol］＇a type of bread＇，［k hase］＇rough＇，［ e epa］＇a dog name＇， ［bosay］＇year＇，［kifay］［1PLI］．Furthermore，in her speech，the same lexical item can be rendered once with［ $\int$ ］and on a different occasion with［s］（e．g．，［sum］ $\sim$［Jum］＇three＇，［ $\left.\int \varepsilon \mathbf{k}^{\mathbf{h}_{\mathbf{i}}}\right] \sim\left[\mathrm{s}_{\mathrm{c}} \mathrm{k}^{\left.\mathrm{h}_{\mathbf{i}}\right]}\right.$＇pride＇）．

In addition，$d s$ is realized as［ $\mathrm{b}_{3}$ ］，［3］and at times，also as［z］．For example， d弓əgmu［d弓əgmu］～［弓əgmu］＇to break（INTR）＇．

We also find variation in the pronunciation of recognizably Indo－Aryan（IA） words．For examples，IA lexical items with a［h］are regularly pronounced with－ out［h］in Kinnauri，e．g．［mel］＇palace＇，［bramən］＇priest＇，［pعlع］＇earlier＇and［hã］ $\sim[\tilde{a}]$＇yes＇．Similarly，IA words with voiced aspirated consonants are regularly

[^12]pronounced without aspiration (e.g. [b] instead of [b ${ }^{h}$ ], e.g. [bem] ~ [bem] 'doubt'). But in the speech of literate Kinnauri speakers we find both the typical Kinnauri pronunciation of IA words without $[\mathrm{h}]$ and $\left[\mathrm{b}^{\mathrm{h}}\right]$ and also the Hindi pronunciation of the same items with [h] and [b $\left.b^{\mathbf{h}}\right]$. Similarly, in particular among literate Kinnauri speakers [ z ] and [z] are in free variation (e.g. [badennnu] ~ [bazennu]) 'to play (INTR)'. [ph] is also realized as [f] (e.g., sap ${ }^{h} i$ [safi] ~ [sap $\left.{ }^{\text {hi }}\right]$ 'handkerchief, rag').

According to Takahashi (2001: 104), [ $\mathrm{\eta}]$ occurs between vowels and [ n ] elsewhere. This is not attested in our material, where [ n ] occurs also intervocalically (e.g., [ganam] 'bad odor', [goniy] 'tree stem'), but the retroflex nasal [ n ] is always followed by a retroflex consonant (e.g., [randole] 'widow', [randoles] 'widower (negative connotation)', [mant(r)] 'female (animal)'). In each such instance in the speech of the older language consultant, we also get a variant without [ n ]. Instead the adjacent vowel is nasalized: [rãdole], [rãdoles], [mãt(r)]. Distinct from this the younger consultants from Sangla village use [n] in these words.

Consonant variation is also found in the word-final position. While $b, d$ and $g$ are consistently realized as voiced stops word-initially, and even though the voicing is largely retained in word-final position, there are some instances where, in casual speech, the word-final voiced stops were realized as voiceless stops or as voiced fricatives. When asked to repeat, language consultants invariably produced a voiced consonant. The following examples represent the Brua variety.

| tag | [tag] ~ [tak] | 'pus' |
| :---: | :---: | :---: |
| fag | $\left[\int \mathrm{g}\right.$ ] $] \sim\left[\int \mathrm{ak}\right]$ | 'birch' |
| fub | [sub] ~ [suß] | 'foam' |
| ts ${ }^{\text {ag }}$ | [ts $\left.{ }^{\text {hag }}\right] \sim\left[s^{\text {h }} \mathrm{ay}^{\prime}\right]$ | 'light' ( N ) |
| mig | [mıg] ~ [miy] | 'eye' |
| baymod | [baŋmod] ~ [baŋmっð] ${ }^{5}$ | 'footprint' |
| ra:g | [ra:g] ~ [raiz] | 'green, blue' |
| dzabug | [zabug] ~ [zaßuy] | 'claw' |
| təgmu | [t(r) əgmu] ~ [t(r) әymu] | 'to break' |

In some cases the duration of the word-final stop is very short, although the language consultants can still identify the consonant. This is indicated in the phonetic transcription used here as unreleased stops ( ${ }^{1}$ ). For example, [jume]

[^13]~ [jomed ${ }^{1}$ ] 'mother-in-law, mother's brother's wife', [ $\mathrm{t}^{\mathrm{h}} \mathrm{ad}^{1}$ ] 'son-in-law', [bid ${ }^{1}$ ] 'shoulder', [bod ${ }^{1}$ ] 'dead skin (due to e.g., illness), bark, peel', [karkeb] 'awl', [bok¹] 'hot', [bonsak¹] 'wild entities (animal, plant)'. However, when a plural marker is affixed to a noun, the stem final consonant occurs explicitly. For example, [tfimsd¹] 'girl, daughter', [ t Imedo:] [girl.PL].

### 2.1.2 Syllable Structure and Consonant Clusters

The attested syllable structures in my data are shown in Table 1o. The syllable nucleus is always a single (short or long) vowel. Hence, description of the syllable structure of Kinnauri boils down to describing possible syllable-initial and final consonant clusters.
table 10 Attested syllable structures in Kinnauri

| CV | do | [3SG.DIST.NVIS] |
| :---: | :---: | :---: |
|  | fa | 'meat, flesh' |
| CVC | rag | 'rock, stone' |
|  | pom | 'snow' |
| CCV | $p^{h} j a$ : | 'forehead' |
|  | kra: | 'hair' |
| CCCV | (s)kjo- | 'male (animal)' |
| CCVC | djarr | 'day' |
|  | (s)kar | 'star' |
| CCVCC | bjonts | 'grasshopper' |
|  | krünts | 'elbow' |
| CVCC | hold | 'flood' |
| V | $u$ : | 'flower' |
| VC | $a g$ | 'cave' |
|  | om | 'path' |
| VCC | ufk | 'old (non-human)' |
|  | oms | 'before' |

### 2.1.2.1 Word-Initial Clusters

There is a limited number of word-initial three-consonant clusters, all of the form sibilant + stop + approximant (e.g. (s)kjo- 'male (animal)') in the speech of some older speakers. Younger speakers consistently provide the forms without the first consonant. Otherwise initial clusters are of the form stop $+[\mathrm{r} / \mathrm{l} / \mathrm{j} / \mathrm{v}]$ (only [p $\left.{ }^{\mathrm{h}}\right]$ and $\left[\mathrm{k}^{\mathrm{h}}\right]$ occur aspirated), sibilant + stop, sibilant + approximant, [ $\mathrm{K}_{3}$ ] $+[r / v]$ and $[v]+[j]$. See Table 10. and additional examples in Table 11.

| [pr] | pramu | 'to spread' | [st] | stal | 'plough' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [pj] | pja(ts) | 'bird' | [tr] | tremu | 'to knead' |
| [br] | bragmu | 'to chew' | [sk] | (s) kad | 'voice' |
| [bj] | bjomu | 'to go' | [sv] | svamu | 'to spoil, ruin' |
| [tv] | tvair | 'Sunday' | [dzj] | dziva | 'heart, soul, spirit' |
| [tj] | tjoy | 'more' | [du] | dzualno | 'shining' |
| [dv] | dvənпи | 'to come out' | [sj] | sjano | 'old (human)' |
| [dj] | djarr | 'day' | [ $\mathrm{k}^{\mathrm{h}}$ ] | $k^{h j} a r$ | 'goat's wool blanket' |
| [kr] | kra: | 'hair' | [ Jv ] | foi:g | 'red' |
| [kv] | kvasmu | 'to boil' | [ $\mathrm{p}^{\mathrm{h}}$ ] | $p^{h}$ ralmu | 'to fell' |
| [kj] | kjar | 'plait, braid' | [ $\mathrm{k}^{\mathrm{h}} \mathrm{r}$ ] | $k^{h} r a m u$ | 'to be late' |
| [gr] | gru:mu | 'to burn (INTR)' | [drr] | drrakhray | 'bush with thorns' |
| [gu] | gvamu | 'to jump' | [dzu] | dzvarat | 'jewel' |
| [gi] | gја:mи | 'to want' | [vj] | vjapar | 'business' |
| [ $\mathrm{p}^{\mathrm{h}}$ ] | $p^{h}{ }^{\text {a }}$ : | 'forehead' | $\begin{aligned} & {\left[\mathrm{k}^{\mathrm{h}} \mathrm{v}\right]} \\ & {[\mathrm{mj}]} \end{aligned}$ | $k^{h}$ vatitimu mja | 'to boil' ‘day’ |

### 2.1.2.2 Word-Final Clusters

Word-final consonant clusters are of the form [nasal/liquid + stop/affricate], [fricative + stop], [stop + affricate] and also [t + k]. See Table 1o. Additional examples are provided in Table 12.
table 12 Word-final consonant clusters

| $[\mathrm{kts}]$ | botokts | 'spider' | $[\mathrm{mp}]$ | lomp | 'small kerosene lamp' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $[\mathrm{tk}]$ | ts $^{\text {hatk }}$ | 'light' | $[\mathrm{nts}]$ | bjonts | 'grasshopper' |
| $[\mathrm{ms}]$ | oms | 'before' | $[\mathrm{mts}]$ | gumts | 'knife' |
|  |  |  | $[\mathrm{ns}]$ | lesans | 'license' |
| $[\mathrm{nt}]$ | banbant | 'much' | $[\mathrm{nt}]$ | tent | 'tent' |
| $[\mathrm{nd}]$ | homay kund | 'altar' | $[\mathrm{nt} \mathrm{h}]$ | bant' | 'share, portion' |
| $[\mathrm{yk}]$ | rajk | 'high, tall' | $[\mathrm{rt}]$ | Jart | 'bet' |
| $[\mathrm{st}]$ | tyust | 'clever' | $[\mathrm{k}]$ | khufk | 'dry (inan. objects)' |
| $[\mathrm{mb}]$ | bomb | 'bomb' | $[\mathrm{ntf}]$ | kuntf | 'wide (inan. objects)' |
| $[\mathrm{ld}]$ | hold | 'flood' | $[\mathrm{pts}]$ | patrapts | 'kidney' |
| $[\mathrm{lk}]$ | melk | 'low' | $[\mathrm{rg}]$ | sorg | 'heaven' |
| $[\mathrm{rk}]$ | surk | 'salty, sour' | $[\mathrm{rts}]$ | tsharts | 'dry (e.g. grass)' |
| $[\mathrm{rs}]$ | nors | 'nurse' | $[\mathrm{rt}]$ | bartf | 'leave behind' |

table 13 Dialect variation: $\left[t\left({ }^{h}\right)(r)\right]$ and $\left[f\left({ }^{(h)}\right)(r)\right]$

|  | Razgramang (Sangla) | Tukpa (Brua) |  |
| :---: | :---: | :---: | :---: |
| list | [lit(r)], [litf ${ }^{\text {h }}(\mathrm{r})$ ] | [lit(r)], [lit ${ }^{\text {h }}(\mathrm{r})$ ] | 'egg' |
| $t^{\text {hanay }}$ | [t ${ }^{\text {hanay }}$ ], [ $\left.\mathrm{t}^{\text {h}}(\mathrm{r}) \mathrm{anay}\right]$ | [ $\left.t^{\mathrm{h}}(\mathrm{r}) \mathrm{ana} \mathrm{\eta}\right],\left[\mathrm{t}^{\mathrm{h}}(\mathrm{r}) \mathrm{ana} \mathrm{\eta}\right]$ | 'ice' |
| $t^{h} a b$ | [ $\left.t^{\mathrm{h}} \mathrm{ab}^{1}\right],\left[\mathrm{t}^{\mathrm{h}}(\mathrm{r}) \mathrm{ab}^{1}\right]$ | [ $\left.t^{\mathrm{h}}(\mathrm{r}) \mathrm{ab}{ }^{1}\right],\left[\mathrm{t}^{\mathrm{h}}(\mathrm{r}) \mathrm{ab}{ }^{1}\right]$ | 'lung' |
| tod | [tod $\left.{ }^{1}\right],\left[t y(r) \mathrm{od}^{1}\right]$ | [t(r) $\left.\mathrm{sd}^{1}\right],\left[\mathrm{t}(\mathrm{r}) \mathrm{sd}^{1}\right]$ | 'disease' |
| tagmu | [təgmu], [ty(r)əgmu] | [t(r)Pgmu], [tf(r) t gmu $]$ | 'to break' |
| mant- | [mãt], [mãnt] | [mant(r)] | 'female (animal)' |

### 2.1.3 Geographical Variation in the Consonant System

On the whole, the speech varieties of Kinnauri speakers of the Brua and the Sangla villages are very similar, including their judgements concerning various aspects of Kinnauri grammar. But there are some minor differences which can be attributed to dialect differences. According to the locals the Kinnauri speech of the Brua village represents the Tukpa Kinnauri variety, while the speech of the Sangla village represents a form of speech associated with the Razgramang variety.

In a restricted set of Kinnauri lexical items, variation is noted between [t] and $[\mathrm{t}]$ ] and between $\left[\mathrm{t}^{\mathrm{h}}\right]$ and $\left[\mathrm{t}^{\mathrm{h}}\right]$ in both varieties. In this set, as illustrated by the examples in Table 13, in the Tukpa (Brua) variety a short [ r ] is heard after both the $\left[t\left({ }^{h}\right)\right]$ and the $\left[t\left({ }^{(h)}\right)\right]$ variants. ${ }^{6}$ Distinct from this, in the speech of the Razgramang (Sangla) speakers, a short [ r$]$ is heard mostly in the $[\mathrm{t}(\mathrm{h})]$ variants of this set.

In the Tukpa variety, a short [-r] is also heard after a retroflex consonant $\left.\left(\left[t{ }^{(h}\right)\right]\right)$ in lexical items which do not show the $[t]$ and $[t]$ variation, as shown in Table 14.

The corresponding lexical items in closely related Kanashi have [tf], and [J] in one instance ('ice'). See Table 15.

[^14]TABLE 14 Dialect variation $\left[t\left({ }^{(h)}\right)(r)\right]$ without $\left[f\left({ }^{(h}\right)(r)\right]$

| Phonemic representation | Razgramang (Sangla) | Tukpa (Brua) |  |
| :---: | :---: | :---: | :---: |
| $t^{h} 0$ | [ $\mathrm{t}^{\mathrm{h}}$ ) ${ }^{\text {] }}$ |  | 'charcoal' |
| $t^{h} o g$ | [ $\mathrm{t}^{\text {ogog] }}$ | [ $\left.{ }^{\text {h }} \mathrm{og}\right],\left[\mathrm{t}^{\text {h }} \mathrm{rog}\right]$ | 'white' |
| pa:t | [pa:t] | [pa:t], [pastr] | 'ankle' |
| tutu | [tutu] | [tutu], [trutru] ${ }^{7}$ | [swell.pFv] |
| kjart ${ }^{\text {a }}$ a $t^{\text {homu }}$ | [ $\mathrm{kjart}^{\text {h }}$ ay $\mathrm{t}^{\text {h }} \mathrm{omu}$ ] | [kjart ${ }^{\text {ha }}{ }^{\text {a }} \mathrm{t}^{\text {h }} \mathrm{omu}$ ], [kjart ${ }^{\text {h }}{ }^{\text {ran }}$ thomu $^{\text {h }}$ | 'to carry under the arm' |

TABLE 15 Kanashi counterparts of Kinnauri $\left[t^{(h)}(\mathrm{r})\right]$ and $\left[\mathrm{t}\left({ }^{\mathrm{h}}\right)(\mathrm{r})\right]$

|  | Razgramang (Sangla) | Tukpa (Brua) | Kanashi |  |
| :---: | :---: | :---: | :---: | :---: |
| li:t | [lit(r)], [lit ${ }^{\text {h }}(\mathrm{r})$ ] | [lit(r)], [lit ${ }^{\text {h }}(\mathrm{r})$ ] | [li(:) t$]$ | 'egg' |
| mant- | [mãt], [mãnt] | [mant(r)] | [mĩt]], [mitf] | 'female' |
| $t^{\text {ho }}$ | $\mathrm{t}^{\text {ho }}$ | $\mathrm{t}^{\mathrm{h}}(\mathrm{r}) \mathrm{o}$ | [tfoptu] | 'charcoal' |
| $t^{\text {hog }}$ | [ $\mathrm{t}^{\text {oga }}$ ] | [ $\mathrm{t}^{\mathrm{h}}$ (r) og ] | [ $\mathrm{f}^{\mathrm{h}} \mathrm{O}(\mathrm{g})$ ] | 'white' |
| tutu | tutu | [t( r$) \mathrm{ut}(\mathrm{r}) \mathrm{u}]$ | [tfurrz] | 'swelling' |
| $t^{\text {hanay }}$ | [ttanay], [tf ${ }^{\text {h }}(\mathrm{r}) \mathrm{anay}$ ] | [th(r)anay], [tf ${ }^{\text {h }}$ (r)anay] | [ [anay], [/fanay] | 'ice' |

It is important to note that this type of variation occurs in a restricted set of words. In the following instances the retroflex stop consonant $\left[t\left({ }^{\mathbf{h}}\right)\right]$ occurs without an $[\mathrm{r}]$ in both the Razgramang and Tukpa varieties.

1. In words where $\left.\left[t^{(h}\right)\right]$ is immediately followed by the transitivizer -ja: (e.g. metja:mu 'to gather (TR)').
2. In words where $\left[t\left({ }^{h}\right)\right]$ is immediately followed by the detransitivizer -ed (e.g. meted-o [gather(INTR)-PROG])
3. [r] does not occur in recognizably IA words with retroflex consonants (e.g. beta 'son').
[^15]
### 2.2 Vowels

Table 16 shows the oral vowel phonemes of Kinnauri and a list of minimal pairs is provided below. See Section 2.2.2 for a discussion of the phonemic status of nasal vowels.

## TABLE 16 Vowel phonemes

| i, i: |  | u, u: |
| :--- | :--- | :--- |
| e, e: | $\partial$ | $o, o:$ |
|  | a, a: |  |

Minimal (or near-minimal) pairs: Vowels

| i: e | timu | 'to wash' | tети | 'to write, to draw' |
| :---: | :---: | :---: | :---: | :---: |
| e:a | eŋе | 'fourth day after today' | $a \eta$ | [1SG.NNOM] |
| :a | әpa | 'father-in-law' | api | 'grandmother' |
| :i | ka | [2SG.NH] | $k i$ | [2SG.H] |
| :u | $p^{h}$ or | 'floor' | $p^{h} u r$ | 'boil, blister' |
| i:u | kim | 'house, home' | kum | 'pillow' |
| i: is | ligmu | 'to put on' | li:g | 'heavy' |
| e: | le | 'day' | le | 'tongue' |
| a: | ka | [2SG.NH] | ka: | 'walnut' |
| :ax | rag | 'stone, rock' | ra:g | 'green, blue' |
| : o | $k^{h} o l a y ~$ | 'threshing floor' | $k^{\text {ho:lo }}$ | 'box' |
| :ut | sumu | 'to bathe (TR)' | fu:mu | 'to preach' |
| o: a | om | 'path, mountain pass' | a:m | 'mango' |

Vowel length is phonemic in Kinnauri, although I have found no instances of disyllabic words which have long vowels in both syllables. Minimal pairs for vowel length are also provided among the examples above. It is important to note that the difference between long and non-long vowels is fairly small. Thus, there is very little difference in length between ray 'horse' and ra:y 'mountain' in (1). See also Figure 5.
(1) ray-raך ra:y den bjo-k
horse-COM mountain over go-1SG
'(I) went over the hill with (my) horse.'

When a vowel-initial suffix is added to a stem which ends in a vowel, there is an intervening [j] or [ u ], the former occurs with front vowels and the latter with back vowels. E.g. $\int$ i-e raך [die-MnR COM] [fije rəy] 'at the time of (his) death'.


FIGURE 5 Spectrograms illustrating phonemic vowel length distinctions $k a$ [2SG.NH] (top) and $k a$ a 'walnut' (bottom)

### 2.2.1 Vowel Allophony and Variation

Some variation is found in the phonetic realization of vowel phonemes in Kinnauri. The phonetic realization of vowel phonemes varies both within the speech of an individual and across speakers: $i$ is realized along the entire spectrum of [i]-[r]. Similarly, $u:[\mathrm{u}]-[\mathrm{v}], e:[\mathrm{e}]-[\mathrm{\varepsilon}], o:[\mathrm{o}]-[\mathrm{o}]$ and $a:[\mathrm{a}]-[\mathrm{e}]-[\mathrm{a}]$.
2.2.1.1 $\quad 0:[0] \sim[\rho]$

In several cases, the same word is pronounced with $[0]$ in one sitting and [ 0 ] in another by the same speaker (e.g. [kotfap] ~ [kotfay] 'direction, side') and across speakers (e.g. [rãdole] ~ [rãdole] 'widow'). At the same time, some systematic distributional tendencies are also observed:

First, $o$ tends to be realized as [ 0 ] before a consonant cluster. Example: [hold] 'flood (N)', [oms] 'before', [sorg] 'heaven'. Second, word-initially o tends to be realized as a [ $\mathrm{\rho}]$. Third, in di-/polysyllabic words which contain $o$ in consecutive syllables, there are a few lexical items with either [ o ] or [ D$]$ in both syllables ([poto] 'seed', [botokts] 'spider', [bっtən] 'button', [dərom] 'religion'), but more frequently in such disyllabic lexical items [ o ] occurs in one syllable and [ 0 ] in the other (e.g. [фorko] 'skeleton', [kokpol] 'a kind of cheese', [p ${ }^{\text {h }}$ gdori] 'felt', [toglo] 'acorn, cone', [ssk ${ }^{\text {h }}$ ] 'scorpion', [sorglok] 'heaven' and [rbrobor] 'simi$l a{ }^{\prime}$ ).
2.2.1.2 $\mathrm{e}:[e] \sim[\varepsilon]$

As was the case with [ 0 ] and [ 0 ], variation is found both within and across speakers. One example of variation within the speech of one speaker: [dames] $\sim$ [dames] 'ox', [kones] ~ [konss] 'male friend of a man'.

There is also some systematicity where the distribution of $[\mathrm{e}]$ and $[\varepsilon]$ holds across speakers.

First, there is some dialectal variation among my language consultants. In the speech of Brua village, in some compound words where the first member is $m e$ : 'fire', its vowel is realized as [ $\varepsilon$ ] (e.g. [ $\mathrm{m} \varepsilon$ fim] 'match', [mehoy] 'firefly'), but the vowel quality does not change in [melın] 'fireplace, oven'. The language consultants from Sangla, however, consistently have an [e] in all the compounds involving me: 'fire'.

Secondly, in recognizably IA words, Kinnauri tends to retain the IA vowels [e] and [ $\varepsilon]$. For example, [sendal] 'sandal', [ $\left[\varepsilon(:) r\right.$ ] 'town', [ ${ }^{\text {thela: }}$ ] 'bag', [defay] 'village, country', [kaledji] 'liver', [mela] 'carnival'.

Third, the distribution of $[\mathrm{e}]$ and $[\varepsilon]$ seems to be sensitive to stem structure. In many stems ending in $-e(C)$ this $e$ is pronounced [e] when stem-final, but $[\varepsilon]$ when followed by a stem consonant, e.g. [jome] ~ [jomed'] 'mother-in-law', [rãqdole] 'widow' ~[rãdolss] 'widower'.

In particular, intransitive verbs formed with the suffix -ed show $[\varepsilon]$ in forms where the stem ends in a consonant, i.e., in the allomorphs -ed and -en (the latter occurring in the infinitive:-ed-mu >-ennu; see Section 4.1.3.4.2), while in the reduplicated perfective, where the stem ends in $-e$, this is pronounced [e]. This variation in vowel quality does not occur in verbs with a single stem ending in $-e$. In these cases [e] occurs in all forms, as expected:

| Infinitive | Progressive | Perfective |  |
| :---: | :---: | :---: | :---: |
| polten-nu [poltennu] | polted-o [poltedo] | polte~te [poltete] | 'to turn around' |
| $t^{\text {huren-nu }}$ [ ${ }^{\text {h }}$ Orennu] | $t^{\text {h }}$ ured-o [ $\mathrm{t}^{\text {h }}$ Oredo] | $t^{\text {hure }}$-re [ $\mathrm{t}^{\mathrm{t}}$ orere] | 'to run' |
| Sen-nu [ $\int \varepsilon \mathrm{nnnu}$ ] | Sed-o [ [fdo ] | fe $\sim$ fe [ $\left[\mathrm{e} \int \mathrm{e}\right.$ ] | 'to send' |
| ren-nu [rennu] | red-o [redo] | re~re [rere] | 'to sell' |
| halay he-mu [halay hemu] | halay he-(j)o [halay he(j)o] | halay he~he [halay hehe] | 'to plough' |
| tre-mu [tremu] | tre-jo [trejo] | tre $\sim$ tre [tretre] | 'to knead' |

### 2.2.2 Nasal Vowels

Vowels preceding nasal consonants are regularly nasalized. However, in a restricted set of words nasalized vowels occur, even when there is no nasal consonant following it. For example $d \tilde{a} s$ 'gnat', tãziraך 'a horse name', suãray 'monday', sujĩ 'tailor (who makes traditional cap and coat)', $\tilde{u} t$ 'camel. ${ }^{8}$ There is at least one minimal pair: bas 'fragrant' : bãs 'bamboo', both IA. If nasal vowels have a phonemic status, it is marginal at best. In this chapter, nasalization will be marked only when there is no following nasal consonant following a nasalized vowel.

### 2.3 Morphophonological Stem Alternations

2.3.1 Nominal Morphophonology

Kinnauri has two kinds of systematic stem alternation which recur in several places in the nominal inflectional system, triggered by particular suffixes.

Polysyllabic stem truncation: As we will see, when certain inflectional suffixes are added to a disyllabic or polysyllabic noun stem ending in -ay, -ij or -es, this final part of the stem is replaced by the inflectional suffix.

Final vowel elision: When certain vowel-initial inflectional suffixes are added to a disyllabic or polysyllabic stem ending in - $a$ or $-e$, the stem-final vowel is deleted (stems in $-a$ ) or replaced by a high glide (stems in $-e$ ). This is normally accompanied by a lowering of the suffix vowel $(-u>-o)$.

### 2.3.2 Verbal Morphophonology

There are some verbs (e.g. bənnu 'to come', lonnu 'to tell', sannu 'to kill', vannu 'to laugh', as well as all intransitive verbs formed with the suffix -ed; see

[^16]Section 4.1.3-4.2), which have three stem allomorphs whose distribution is morphophonologically determined: $-V,-V d$, and $-V n$.

The $n$-final allomorph appears in the infinitive, which ends in -nnu in these verbs (e.g. sannu 'to kill'), most likely due to a mutual assimilation process between the stem-final $-d$ and the affix-initial $-m$, where the $d$ assimilates in nasality and the $m$ in place of articulation.

The $d$-final allomorph appears in the following contexts: In the progressive aspect (e.g. sad-o [kill-PROG]); when the manner marker -e is suffixed to the verb (e.g. vad-e [laugh-mnR]) and in the imperative (e.g. sad [kill.Imp]).

The vowel-final allomorph appears in the past tense (e.g. sa-kjo [kill-pst]) and in the reduplicated perfective (e.g. $s a \sim s a[\mathrm{kill} \sim \mathrm{PFV}]$ ). The default verbal past tense markers are -gjo and -ge, but with this set of verbs the past tense markers are realized as $-k j o$ and $-k e /-k i .{ }^{9}$

| $\mathbf{V}$ (INF) | $\mathbf{V}$ (PST) | $\mathbf{V}(\mathbf{P S T}-\mathbf{3 S G . H})$ | $\mathbf{V}(\mathbf{P R O G )}$ |  |
| :--- | :--- | :--- | :--- | :--- |
| lonnu | lo-kjo | lo-ki-f | lod-o | 'to tell' |
| bannu | ba-kjo | ba-ki-f | bad-o | 'to come' |
| tonnu | to-kjo | to-ki-f | tod-o | 'to take out' |
| vannu | va-kjo | va-ki- | vad-o | 'to laugh' |
| tannu | ta-kjo | ta-ki- | tad-o | 'to do' |

### 2.4 Suffix Suppletion

Some inflectional categories in Kinnauri exhibit suffix suppletion, with (morpho)phonologically determined distribution of the alternants. This holds for the dative (-u/(-)par; Section 3.2.4.3), for the perfective (-is/[~RED]; Section 4.5.2.2), for the habitual (-id/-ts; Section 4.5.2.3), and marginally for the locative (-o/-r; Section 3.2.4.5). In all these cases, we seem to be dealing with genuine suppletion, and not, e.g., distinct items with overlapping functions.

[^17]
## 3 Noun Phrase

### 3.1 Noun Phrase Structure

The noun phrase in Kinnauri has the following basic structure:

$$
\begin{aligned}
& \left(\mathrm{DEM} / \mathrm{NP}_{\text {Poss }}\right)(\mathrm{Num})((\mathrm{Adv}) \text { Adj) } \mathrm{N}(-\mathrm{DIM})(-\mathrm{PL} /-\mathrm{DU})(-\mathrm{CASE})(-\mathrm{EMP}) \\
& (\mathrm{FOC} / \mathrm{TOO})
\end{aligned}
$$

For example:
(2) do tif val gato-ts tshetsa-ts-or-s le

DEM.DIST.NVIS seven very small-dim girl-DIM-PL-ERG TOO
'Those seven very small girls, too, ...'
(3) ka-s-i ta raj-o-n

2SG.NH-ERG-EMP FOC tell.1/2O-PST-2SG.NH
'You (yourself) told (me that).'

The N can consist of a title plus a name. In such cases both orderings, [name title] and [title name], are possible.
(4) dafrath ra:dz-o fum ra:ni
i.name king-poss three queen
'The three queens of King Dashrath'
(5) dok raidza dafrath-is
then king i.name-ERG
'Then the king Dashrath ...'

In some discourse contexts, the emphatic marker may precede the locative case marker (e.g., obor-i-o [dungeon-EMP-LOC]). The most frequent order is, however, where the emphatic marker occurs after the case marker.
(6) do rapja neray-o-i bad-o du-gjo

3SG a.bird near-LOC-EMP come-PROG AUX-PST
'She was coming near the bird.'
We now turn to a description of the components of the noun phrase.

## 3.2 <br> Nouns

3.2.1 Noun Structure and Word Formation
3.2.1.1 Noun Structure

Most nouns in Kinnauri are monosyllabic or disyllabic. ${ }^{10}$ Monosyllabic nouns can end in both vowels and consonants, e.g.:

| ti | 'water' | pju | 'mouse' | fub | 'foam' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| kra: | 'hair' | $(s) \mathrm{kad}$ | 'language' | thay | 'boy' |
| u: | 'flower' | mig | 'eye' | dzod | 'wheat' |
| ha:p | 'jackal' | tsam | 'wool' | $(s) k a r$ | 'star' |

Disyllabic nouns in Kinnauri often end in -Vy, -Vs or -pa. Disyllabic nouns may, however, also end in other syllables. The endings -Vy and -Vs appear on IA loanwords and words of unknown etymology (nouns and adjectives), never on ST items, and seem to function as adaptive markers, which simultaneously accomodate the non-ST items to the inflectional system of Kinnauri, and mark them as foreign. They show special behavior in derivation ${ }^{11}$ and inflection (see below).

| dejay | 'body' | eray | 'hunting' |
| :---: | :---: | :---: | :---: |
| dokhay | 'mountain' | $k^{h}$ iray | 'milk' |
| bruay | 'a village name' | ra:pay | 'a village name (Sapni)' |
| kotiy | 'a kind of basket' | baniy | 'pots and pans' |
| gath ${ }^{\text {in }}$ | 'traditional belt' | $t^{\text {hepay }}$ | 'traditional cap' |
| bitip | 'wall' | gubiy | 'storey, level' |
| dames | 'ox' | sapes | 'snake' |
| $t^{\text {h }}$ unpa | 'maidservant' | gompa | 'step' |
| bospa | 'ash' | fupa | 'evening' |

10 There is a large number of IA words in Kinnauri. As many of them are part of the core vocabulary, they are included in the present discussion. Only those words which are identifiably recent loanwords (e.g. setelajt tivi 'satellite television') are excluded. In the IA expressions with the IA honorific marker -d $j i$ in Kinnauri, case markers follow -dji (e.g., brahmandji-ju [priest.H-poss], hanumandji-ju [a.hindu.god.н-poss]). -dji is treated here as part of the lexical item, and not as a separate functional morpheme.
11 These words tend not to take derivational suffixes, although there are a few instances of nouns where the adaptive marker -ay is followed by the diminutive marker -ts. E.g. "to-tali ma-ta-li jali pant hay-t-o" lod-o [COP-FUT-EMP NEG-FUT-EMP downstairs living.room-dim-LOC tell-prog] '"If it is there or is not there, (those two) are downstairs in the living room" (the fox) is saying'.

| sut ${ }^{h}$ on | 'traditional trousers' | june | 'sun' |
| :--- | :--- | :--- | :--- |
| sok $k^{h} O$ | 'scorpion' | timed | 'daughter' |
| $\partial k^{h} a$ | 'pain' | tshemar | 'lizard' |

There are some nouns in Kinnauri which are longer. Most of them are, however, compounds (e.g. ka:nay- $k^{h}$ [ [ear-shit] 'earwax') or seemingly compounds (e.g. dyanekay 'marriage', purtfuti门 'dust').

As the examples below illustrate, there are no structural differences between (i) count and mass nouns, (ii) concrete and abstract nouns, and (iii) inanimate, animate and human nouns. Such nouns can be mono- or disyllabic, ending in similar vowels and consonants.
(i) Count nouns Mass nouns
(s)to: 'face' (s)pu: 'body hair'
pja 'bird' ts ${ }^{h} a \quad$ 'salt'
rud 'horn' $k^{h} o d$ 'dandruff'
mi 'man' me: 'fire'
(ii) Concrete nouns Abstract nouns

| bal | 'head, top' | lain | 'air, wind' |
| :--- | :--- | :--- | :--- |
| dok ${ }^{h} a y$ | 'mountain' | mith $a \eta$ | 'envy, jealous' |
| rag | 'stone, rock' | tshag | light (n)' |

(iii) Inanimate nouns Animate nouns
dzay 'gold' ray 'horse'
tromay 'copper' Jokray 'orphan'
va: 'nest' pja 'bird'

### 3.2.1.2 Word Formation of Nouns

In Kinnauri there is a small set of derivational morphemes deriving nouns from nouns. These are mant-, (s)kjo-, bi-, ran-, -(o)nig and -ts. With the exception of -ts (which also attaches to other parts of speech), they are not productive in the modern language.

| mant- | 'female (animals)' | mant-kukari | 'hen' |
| :--- | :--- | :--- | :--- |
| (s)kjo- | 'male (animals)' | (s)kjo-kukori | 'cock/rooster' |
| bi- | 'step- (kinship)' | bi-bon, bi-boba | 'stepfather' |
| bi- | 'step- (kinship)' | bi-ama, bi-man | 'stepmother' |
| ran- | 'defective' | ran-tshesmi | 'widow' |
| -onig | [-FEMALE] | rikh-onig | 'she-bear' |
| -onig | [-FEMALE] | sod-onig | 'priest's wife' |
| -ts | [-DIM] | pja-ts | [bird-DIM] |
| -ts | [-DIM] | tshetsa-ts | [girl-DIM] |

A more productive process of forming complex nouns is compounding. By "compound" in this work I mean a single word unit, which consists of at least two independent stems. Most frequently the compounds in Kinnauri consist of two stems. Structurally, they are made up by N-N or Adj-N.

N-N

| $e \int i n$ | $m e:+\int ı$ | [fire+wood] | 'match |
| :---: | :---: | :---: | :---: |
| ehoy | me:+hon | [fire+worm] | 'firefly' |
| ay | vas+jay | [honey+fly(n)] | 'bee' |
| isti | $m i g-s+t i$ | [eye-LNK+water] | 'tear' |

Adj-N
rokmig rok+mig [black+eye] 'pupil'
padzar pa+dzar [four+corner] 'square'

The following phonological modifications have been observed to occur when the element stems become a part of a nominal compound. The vowel of the first stem is reduced (e.g., [i] > [r], [ii] > [i]). For example, $t i+d a: m e s ~[w a t e r+o x] ~$ $>$ [tidames] '(non-castrated) bull'. When the first component of a compound ends with an adaptive marker ( $-V \eta$ ), the adaptive marker is frequently deleted (e.g. boniy+sak [forest+wild.creature] > [bonsak] 'wild animal', boniŋ+mi-ts [forest+man-DIM] > [bonmits] 'fairy, elf', haray+kotiy [bone+kind.of.basket] > [harkotij] 'skull').

Further, if the first stem ends in a consonant, in some cases, the stem final consonant is deleted (e.g. gud $+s a b$ [hand+narrowness] > [gosab] 'glove',
$p i: g+j a \eta[$ yellow + flea $]>[\mathrm{pija} \mathrm{\eta}]$ 'wasp', juŋdz+riydz[brother+sister] $>[\text { joŋrıŋ }]^{12}$ ) or it gets assimilated for voicing (e.g. sag $+t i$ [core+water] $>$ [sagti] $\sim$ [sakti] 'whirpool'). There does not seem to be any specific phonological context which determines when a final consonant will be deleted. In the following examples, the phonological shape of the first component of a compound remains unaffected.

| migbod | mig-bod | [eye-skin] | 'eyelid' |
| :--- | :--- | :--- | :--- |
| sakpju | sak-pju | [wild.creature-rat] | 'outdoor rat' |
| bonprats | bon-prats | [father-finger] | 'thumb' |
| vasjay | vas-jay | [honey-fly(N)] | 'bee' |
| balrig | bal-rig | [head-louse] | 'head louse' |
| bapmod | bay-mod | [foot-impression] | 'footprint' |
| manbon | man-bon | $\left[\right.$ mother-father] ${ }^{13}$ | 'parents' |

In a restricted sub-set an additional $-s^{14}$ occurs as a linking element between the stems (e.g. mig-s-ti [eye-LnK-water] > [misti] 'tear', mig-s-pu [eye-Lnkbody.hair] > migspu 'eyebrow, eyelash'). ${ }^{15}$

### 3.2.2 Number

Generally, a two-way number distinction-singular vs. plural—is made in Kinnauri nouns (but see Section 3.3.2.1 below for some instances of dual marking). The singular is zero-marked. Mass nouns such as $t i$ 'water', $m e$ : 'fire', dju 'clouds' do not take a plural marker. Similarly, nouns denoting unique natural objects such as 'sky', 'moon' and 'sun' do not take the plural marker.

The following plural markers are found in our material: -a:, $-e_{r},-o: /-g_{0}$ and lengthening of the stem-final vowel. The distribution of the plural markers on nouns is not completely systematic, but some tendencies are observable.

Nouns which end in one of the adaptive markers ( $-\mathrm{V} / /-\mathrm{Vs}$ ) permit polysyllabic stem truncation (see Section 2.3.1) and the plural marker $-a$ : is added to the resulting truncated stem. Additionally, with noun stems ending in the frontvowel adaptive suffixes -ij/-es, a -j normally appears between the truncated stem and the plural ending.

[^18]
## Singular Plural

haray har-a: 'bone'
ãdzay $\tilde{a} d_{3}-a: \quad$ 'intestine'
moray mor-a: 'mask for gods made of gold/silver'
ta:nay ta:n-a: 'jewelry'
dok ${ }^{h} a y$ dokh-a: 'mountain'
dames dam-a: 'ox'
bitiy bitj-a: 'wall'
takfuliŋ takfulj-a: 'nostril'
ores orj-a: 'carpenter, name of a social group'
banes banj-a: 'pot'
kones konj-a: 'male friend of a man'
gales galj-a: 'abuse'

In nouns with the adaptive markers, the adaptive suffix can be retainedapparently with no difference in meaning. In such instances the regular plural marker -o:/-go: occurs.

## Singular Plural

| gairay | gairay-or, gair-a: | 'river' |
| :---: | :---: | :---: |
| dejay | dejaŋ-or, dej-a: | 'body' |
| kotin | kotiy-o:, kotj-a: | 'basket which is carried on the back' |
| junnay | junnay-o:, junn-a: | 'mortar' |
| hasgotay | hasgotay-o:, hasgot-a: | 'hand.grinding.stone' |
| pathray | pat ${ }^{\text {h }}$ alo-or, pat ${ }^{\text {h }}$-a: | 'leaf' |

In a few nouns, the stem-final vowel is lengthened to mark plurality by our Tukpa language consultant, but our Razgramang (Sangla) younger language consultants did not permit vowel lengthening as a plural marking device here, instead selecting -gor as the plural marker in all the following examples, except 'sheep/goat' (which is also irregular in losing the stem-final consonant).

## Singular Plural

| ate | ate:, ate-go: | 'older brother' |
| :--- | :--- | :--- |
| rikh $a$ | rikha:, rikha-go: | 'bear' |
| le | le:, le-go: | 'tongue' |
| $m i$ | mi:, mi-o', mi-go: | 'man' |
| dzed | $d z e:$ | 'sheep/goat' |

In a restricted set of nouns the plural marker is -e:

## Singular Plural

| rot | rot-e: | 'chapati' |
| :--- | :--- | :--- |
| ts ${ }^{\text {hatig }}$ | tshatig-e: | 'mosquito' |
| elkar | elkar-e: | 'minister' |
| riydz | riydz-e: | 'sister' |
| sok | sok-e: | 'co-wife' |
| ha:p | ha:p-e: | 'jackal' |
| gambu:t | gambuit-e: | 'boot' |

The plural marker -e: also occurs with the numeral id 'one', forming a generic pronoun (7-8).
(7) id-et-s ay thay-ts lod-o du
one-PL-ERG 1SG.NNOM boy-DIM tell-PROG AUX.PRS
'Some are saying: "(You are) my son".'
(8) id-e:-nu na:ne lod-o
one-pl-DAT.PL aunt tell-PROG
'(He is) calling some (women) "Aunt".'

In the remaining cases, the default plural marker is -o:/-go:, where -go: [go:] occurs after a stem-final vowel and -o: [ m ] ] after a stem-final consonant. These plural markers also occur after an agentive nominalizer. The plural marker -a:/-gar, too, occurs in our material, e.g. baniy : baniŋ-a: $\sim$ banj-a: 'kitchen utensils'. According to our Sangla consultants -a:/-ga: reflects the speech of some other Kinnauri varieties, but not that of Sangla.

## Singular Plural

| $t^{h} a r$ | $t^{h}$ ar-o: | 'leopard' |
| :--- | :--- | :--- |
| rag | rag-o: | 'stone, rock' |
| krog | krog-o: | 'ant' |
| ray | ray-o: | 'horse' |
| mig | mig-o: | 'eye' |
| gud | gud-o: | 'hand, arm' |
| $k^{h j a r ~}$ | $k^{h j a r-o: ~}$ | 'blanket made of goat's hair' |
| stal | stal-o: | 'plough' |
| gar | gar-o: | 'tooth' |
| tin | tin-o: | 'fingernail' |
| fin | fin-o: | 'wood' |
| kep-ts | kep-ts-o: | 'small needle' |
| mul | mul-o: | 'silver' |
| mig | mig-o: | 'eye' |
| bed | bed-o: | 'traditional doctor' |
| bod | bod-o: | 'peel' |
| timed | timed-o: | 'girl, daughter' |
| gone | gone-go: | 'wife' |
| pifi | pifl-go: | 'cat' |
| ama | ama-go: | 'mother' |
| lantsja: | lantsja:-go: | 'maker' |
| bore | bore-go: | 'brother's wife' |
| gora | gora-go: | 'stone.house' |
| pordza | pordza-go: | 'citizen' |
| sjano | sjano-go: | 'old man' |
| jaydze | jaydze-go: | 'old woman' |
| dzuti | dzuti-go: | 'hair ribbon' |
| phofa | phofa-go: | 'deer meat' |
| ra:ni | ra:ni-go: | 'queen' |

The plural marker occurs also in noun phrases which include a numeral.
(9) nif timed-o: to-ke two girl-PL COP-PST
'There were two girls.'

### 3.2.3 Gender

Gender is not a grammatical category in Kinnauri nouns, other than in the restricted sense that the language has a "variable" class of adjectives, which distinguish a masculine and a feminine form reflecting natural sex in animate nouns (see Section 3.4). There are also some word-formation devices for creating nouns denoting female and male humans and animals. ${ }^{16}$ With two exceptions to be described below, these processes are not productive.

A few nouns denoting female referents end in -mo or in -ma (e.g. ama 'mother'). In Tibetan loanwords, Tibetan rules for gender distinction are followed (for example $d z o$ 'mountain ox' : dzomo 'mountain cow').

Further, with animal names the gender distinction can be encoded by means of the prefixes $(s) k j o$ - and mant-. (s)kjo-denotes male and mant-denotes female animals. As the following examples illustrate, the ST gender prefixes $(s) k j o-$ and mant- can also be affixed to loan nouns in Kinnauri. However, (s)kjo- and mantdo not occur frequently in natural texts.

| $(s) k j o-r a \eta$ | 'stallion' | mant-raך | 'mare' |
| :--- | :--- | :--- | :--- |
| $(s)$ kjo-kui | 'dog' | mant-kui | 'bitch' |
| $(s) k j o-k u k a r i$ | 'rooster' | mant-kukari | 'hen' |
| (s)kjo-pifi | 'cat (male)' | mant-pifi | 'cat (female)' |
| (s)kjo-t'har | 'leopard (male)' | mant-thar | 'leopard (female)' |
| (s)kjo-kangaru | 'kangaroo (male)' | mant-kangaru | 'kangaroo (female)' |

There is also a restricted set of feminine nouns characterized by the suffix -onig, e.g.:

| rakses | 'demon' | raksonig | 'demoness' |
| :--- | :--- | :--- | :--- |
| rikha | 'bear' | rikhonig | 'she-bear' |
| surres | 'pig (male)' | su:ronig, mant-su'res | 'sow' |
| sod | 'priest' | sodonig | 'priest's wife' |
| ores | 'male belonging to a | oronig | 'female belonging to a |
|  | certain caste' |  | certain caste' |

A possible IA influence could be seen in some noun pairs, where the feminine noun forms end in -ior -e, and the corresponding masculine forms in most cases end in an -o.

16 As just mentioned, Kinnauri does not have grammatical gender, and below we use "masculine" ( M ) and "feminine" ( F ) about nouns denoting male and female referents, respectively.

| laro | 'bridegroom' | lari | 'bride' |
| :--- | :--- | :--- | :--- |
| dzaro | 'deaf $(\mathrm{M})$ ' | dzare | 'deaf (F)' |
| kano | 'one-eyed (M)' | kane | 'one-eyed (F)' |
| faro | 'beautiful (M)' | fare | 'beautiful (F)' |
| tores | 'thief $(\mathrm{M})$ ' | tore | 'thief (F)' |

The following two almost-grammatical processes are, however, productive. In the agentive nominalization the choice of the nominalizers: -tsja: and -tse:, signals gender, where -tjja: denotes male referents and -tse: denotes female referents. ${ }^{17}$
gas-o: tli-tsja: 'washer of clothes (м)' gas-o: tfi-tse: 'washer of clothes (F)' gas-o: pon-tsja: 'tailor (M)' gas-o: pon-tse: 'seamstress (F)' ne-tsja: 'knower (M)' ne-tse: 'knower (F)'

In the contrastive specifier markers too, a gender distinction is made: -sja: [-CNTR.m] and -se: [-CNTR.F]. For example, tfad-sja: [son.in.law-Cntr.m] and timed-se: [girl-CNTR.F]. ${ }^{18}$

The gender distinction is also indicated in the terms used to describe inhabitants of villages in Kinnaur or of Kinnaur. This is done by affixing two distinct sets of bound morphemes to the village name (see Table 17). In some cases the stem is modified in the process. The -pa and -mets suffixes are ST in origin, while the other suffixes appear to be IA.

### 3.2.4 Case

The case markers in Kinnauri are shown in Table 18. The nominative is unmarked. Other case markers are suffixes. ${ }^{19}$ They are generally agglutinated to the last element of the noun phrase, normally a noun or pronoun (in the singular, dual or plural), although it also appears in headless NPs, e.g., added to an adjective or numeral.

[^19]
### 3.2.4.1 Nominative

The nominative form is the stem of a noun or pronoun without any other case suffixes. This form can be used for subjects (intransitive and transitive)-i.e., the NP triggering subject indexing in the verb—and direct objects.

TABLE 17 Place names and nouns denoting inhabitants

| Official name | Place name in Kinnauri | Men (or people) from this place | Women from this place |
| :---: | :---: | :---: | :---: |
| Kinnaur | kanoriy | kanores | kanorije |
| Baturi | botrin | botres | botre(ts) |
| Batseri | boseriy | boseres | bosere(ts) |
| Kanai | kone | konpa | konmets |
| Kamru | mone | monpa | monmets |
| Pangi | paye | рапра | paymets |
| Bhaba | vappo | vappa | vapmets |
| Sangla | sayla | saךlagja, saŋlagpa, saŋlakpa | saylage |
| Kothi | koftampi | koftampa, koftampipa | koftammets, koftampimets |
| Poo | pu: | pupa | pumets |
| Kadogri | ka:dogri | ka:dogripa | ka:dogrimets |
| Nako | nako | nakopa | nakomets |
| Leo | lijo | lijopa | lijomets |
| Kanam | kanam | kanampa | kanammets |
| Sungra | grosnam | grosnampa, grospa | grosmets, grose |
| Purbani | рәппат | рәппатра, рәппатја | pənnammets, pənname |
| Punang | punay | punaypa | punaymets, pu:nets |
| Brua | bruay | brumpa | brumets |
| Shong | for | Sompa | fomets |
| Chansu | taasay | taasappa | tfa:sanmets, fa:se |
| Labrang | labray | labraypa | labraymets, labre |
| Rarang | raray | rarappa, rapa | rarajmets, ramets |
| Nichar | naltse | naltsinpa | naltsinmets |
| Telangi | tele | telinpa | teliymets |
| Kilba | kilba | kilippa | kilinmets |
| Chitkul | $t^{\text {h }}$ tkul | $t^{\text {h }}$ tkulja, $t^{\text {h }}$ itkula | $t^{\text {hitkulmets, }} t^{\text {h }}$ itkule |

table 18 Case markers in Kinnauri

| Case | Case marker(s) |
| :--- | :--- |
| Nominative | $\emptyset$ |
| Ergative/instrumental | $-i s /-s$ |
| Dative | $-u,-n(u),(-) p \partial \eta$ |
| Possessive | $-u,-n(u)$ |
| Locative | $-o,-n(o),-r$ |
| Ablative | $-t f$ |
| Comitative | $(-) r \partial \eta$ |
| Manner | $-e$ |

### 3.2.4.2 Ergative/Instrumental

The case marker -is/-s functions both as an ergative marker and as an instrumental marker. It has two allomorphs: $-s$ and $-i s[\mathrm{Is}] \sim[\partial s] .{ }^{20}$ Their distribution is phonologically determined: -s occurs with stems ending in a vowel and -is occurs with stems ending in a consonant.

The ergative marker occurs only on the subject of transitive verbs, ${ }^{21}$ but its occurrence is not obligatory. Examples (10-13) show that the occurrence of the ergative marker is not restricted to any specific tense, aspect or person. These examples further illustrate that the ergative marker occurs in descriptive narration (10, 12), as well as inside direct speech (11) and in clauses which introduce direct speech (12).
(10) rudza ${ }^{22-t s-i s ~ i d ~ k u t o n ~} p^{h j o-g j o ~}$ o.man-dim-erg one demon(F) take.away-pst 'The old man took away a female demon.'

[^20]```
(11) ki-s ase tai-ti-n
    2SG.H-ERG torture(N) keep-FUT-2H
    'You will torture (her).'
(12) Sepa ra\eta fampa-t-is lod-o
    i.name COM i.name-DIM-ERG tell-PROG
    'Shepa and Shampa were telling.'
(13) do thar thay-ts-o:-s ta ne-o du
    DEm.DIST.NVIS leopard child-dim-Pl-ERG FOC know-Prog aux.PRS
    'Those leopard cubs are knowing (know) (this).'
```

Kinnauri allows both an ergative and a dative marker in a simple finite clause. For example:

```
(14) do-s id fu-pə\eta pidz-a
    3SG-ERG one god-DAT pray-PST
    'He prayed to one god.'
```

The only bound morpheme which may be suffixed to the ergative marker is the emphatic suffix - $i$ (see example 15). Discourse markers which refer to an NP (e.g. $t a$ in example 15) occur after the NP.

```
(15) ka-s-i ta rə\eta-o-n
    2SG.NH-ERG-EMP FOC tell.1/2O-PST-2SG.NH
    'You (yourself) told (me that).'
```

The ergative marker in Kinnauri narratives functions as a linguistic tool to describe a shift in perspective (Saxena 2007). An examination of the occurrence of the ergative marker in traditional narratives shows that the ergative marker occurs almost obligatorily on the subject in the he said-construction (the direct-speech introducing statement "he said: Direct speech"). The occurrence of the ergative marker here can be seen as a deictic marker which draws the listener's attention to the change in the mode of narration-from the descriptive to the expressive mode. Similarly, the ergative marker in other contexts in narratives occurs regularly in situations where the clause describes something which runs counter to expected behavior (including social norms). The ergative marker in such situations, too, functions as a discourse marker, the aim of which is to highlight the shift in the perspective-to draw the listeners' attention away from the default expectation mode. ${ }^{23}$

The case marker -is/-s also functions as the instrumental case marker. As an instrumental marker, it occurs with both concrete and abstract nouns.
(16) isan ta rakses-is bukraךbuk bal-is bott ${ }^{h} a \eta-u$ ran-gjo
briefly FOC demon-ERG with.a.thud head-Ins tree-DAT give-PST 'For a while, the demon banged the tree with (his) head.'
(17) $\mathrm{rad}^{h} a-s$ gas-or ti-s ti-o
i.name-ERG garment-PL water-INS wash-PST
'Radha washed clothes with water.'
(18) $d u$ num-s ${ }^{24}$ val $k^{h} u f-i s$ nal-is du-gjo

3SG.Poss after-INS much happiness-INS enjoyment-INS COP-PST 'After that, (they) lived with much happiness and enjoyment.'
(19) petiy $\quad \partial k^{h} a-s \quad \int i-o \quad d u-k$
stomach/belly pain-INS die-Prog aUX-1SG
'(I) am dying of stomach/belly ache.'

The instrumental marker also occurs with directional expressions, such as berin 'outside', $t^{h} u g$ 'above'.

$$
\text { (2o) } t^{h} a d-s j a: \quad t^{h} u g \sim t^{h} u g-s^{25} \quad \text { bjo~bjo }
$$

son.in.law-CNTR.M above~ECHO-INS go~PFV
'The son-in.law went up there.'

### 3.2.4-3 Dative $^{26}$

The dative case markers are $-u$ and (-)pə $\begin{aligned} \\ \text { in the singular and }-n(u) \text { in the plural. }\end{aligned}$ $-n u$ and $-n$ are interchangeable, without any apparent change in the meaning, although $-n$ tends to occur more frequently in fast speech. ${ }^{27}$ The dative suffixes never trigger polysyllabic stem truncation.

23 The functional distribution of the ergative marker noted here is not unique to Kinnauri. There are a number of other ST languages, which are reported in Saxena (2007)—Pattani, Lhasa Tibetan, Qiang (LaPolla 2017b), Baima (Chirkova 2005; Katia Chirkova, p.c.)—as well as Tibetic varieties (Bettina Zeisler, p.c.), that show similar behavior (see also Chelliah and Hyslop 2011-2012).
See Saxena (2008) for the grammaticalized usages of oms [ mms ] and nums.
25 There is no vowel between the stem-final $-g$ and the instrumental marker - $s$.
26 "Objective" would perhaps be a more apt name, but I follow a long tradition in the description of South Asian languages, where "dative" designates a case which can appear on both direct and indirect objects, and in the so-called "experiencer subject" construction.

With nouns in the singular, the dative marker - $u$ occurs predominantly with stems ending in a consonant and (-)paŋ occurs predominantly with stems ending in a vowel. There are, however, instances in narratives and in the directelicited material, of one and the same noun taking the dative marker $-u$ at one place and (-)par at another.

| Nom | Dat |  | Nom | Dat |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| baits | baits-u | 'y. sibling' | ma:duri | ma:duri(-)paŋ | 'i.name' |
| pjats | pjats-u | '(small) bird' | ts ${ }^{\text {hesmi }}$ | $t^{\text {h }}$ esmi $(-) p \partial \eta$ | 'woman' |
| dig | dig-u | 'pot' | mi | $m i(-) p$ 何 | 'man' |
| bakhor | bakhor-u | 'goat' | $t^{\text {h }}$ anli | $t^{\text {hananli(-) }}$ paŋ | 'shawl' |
| $t^{\text {hay }}$ | $t^{h} a y-u$ | 'boy' | raini | ra:ni(-)paך, ra:ni-u | 'queen' |

(21) tan-a:~thana: tseik ra:ni-u ran~ran
jewelry-PL~ECHO all queen-DAT give~PFV
'(The king) gave all, jewelry etc, to the queen.'
$-n(u)$ occurs only with plural arguments. The language consultants exhibit free variation between - $n u$ and $-n$ in their speech.
(22) ga mi-o:-nu ${ }^{28}$ fa ran-ta-k

1SG.NOM man-PL-DAT.PL meat give-FUT-1SG
'I will give meat to the men.'

The following examples illustrate $-u$ and (-)pay with singular direct objects and $-n(u)$ with plural nominal direct objects.

```
(23) do-s do tsit \({ }^{h} i(-) p a \eta\) tser-ts
3SG-ERG DEM.DIST.NVIS letter(-)DAT tear-HAB
'He tears up that letter.'
```

(24) timed-u $k u \sim k u$
daughter-DAT call $\sim$ PFV
'(He) called (his) daughter.'

[^21]```
(25) tseik tfimed-or-nu dzar-u du-gjo
    all daughter-Pl-DAT.PL eat-PROG AUX-PST
    '(The demon) was eating all the daughters.'
```

The occurrence of the dative marker is, however, not obligatory. In natural discourse its occurrence correlates strongly with semantic factors such as animacy and definiteness, where direct objects which are higher on the animacy and agency hierarchies tend to receive an explicit case marker.

As is the case with many South Asian languages, Kinnauri, too, has the dative experiencer construction; see Section 5.1.

### 3.2.4.4 Possessive

The possessive markers in Kinnauri are $-u$ in the singular and $-n(u)$ in the plural. $-n u$ and $-n$ are interchangeable, without any apparent change in meaning.
(26) id jaydze-ts-u kim-o tof-gjo
one o.woman-DIm-poss house-LOC sit-pST
'(They) stayed at an old woman's house.'
(27) $\int u m$ ate-gor-nu bore-go: val-i mari
three o.brother-PL-POSS.PL brother's.wife-PL much-EMP bad
tshets-a: du-gjo
woman-PL COP-PST
'The wives of (her) three brothers were very bad women.'

The possessive singular suffix - $u$ optionally triggers polysyllabic stem truncation (see Section 2.3.1), being realized as -o in this case (e.g., bo: $t^{h} a y$ 'tree', bo:t $t^{h}-o$ [tree-POSs]). It also optionally triggers final vowel elision (see Section 2.3.1).

| Nom | Poss | Nom | Poss |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ri | rj-u, ri-u | 'a kind of tree' | jajdze jajdzj-o, jaydze-u | 'old woman' |  |
| dasi | dasj-u, dasi-u | 'female servant' | fibdzi | fibdji-u | 'i.name' |

The following examples illustrate the attributive use of the possessive markers with singular and plural possessors.
-u
$-n(u)^{29}$

| atjo kim | 'o.brother's house' | atego:n(u) kim | 'o.brothers' house' |
| :---: | :---: | :---: | :---: |
| atjo rim | 'o.brother's field' | atego:n(u) rim | 'o.brothers' field' |
| atjo pa bort ${ }^{\text {a }}$ a | 'o.brother's four trees' | ategorn(u) po bo:t ${ }^{\text {a }}$ : | 'o.brothers' four trees' |
| miu tfimedo: | 'the man's daughters' | minu tfimedo:, mijo:nu timedo: | 'the men's daughters' |

### 3.2.4.5 Locative

The locative markers are $-o,-n(o)$ and $-r$. Of these, $-o$ and $-n(o)$ are productive: $-o$ occurs in the singular (with stems ending in both consonants and vowels ${ }^{30}$ ) and $-n(o)$ in the plural. -no and $-n$ are interchangeable, without any apparent change in the meaning.

| Nom | Loc Sg | Loc Pl |  |
| :---: | :---: | :---: | :---: |
| kim | kim-o | kim-o:-n(o) | 'house' |
| defay | defar-o, def-o | defay-o:-n(o), def-a:-no | 'village' |
| $t^{\text {hepin }}$ | $t^{\text {hepin-o }}$ | $t^{\text {e epiy-or-no, }}$ thepja:-n(o) | 'traditional cap' |
| le | le-o | le-o:-n(o) | 'tongue' |
| pagari | pagari-o | pagari-o:-no | 'turban' |

(28) obor ${ }^{31}$-o $\quad$ e-ta-k
dungeon-LOC send-FUT-1SG
'(I) will send (this person) into the dungeon.'
(29) dok om-o:-no bospa rafay-o: kis-i ni-ts to then path-Pl-LOC.Pl ash pile-Pl many-Emp stay-HAB AUX.Prs 'Then, on the way there are lots of piles of ashes.'

29 Though both $-n u$ and $-n$ are permissible here, language consultants prefer the form with -nu.
30 When the locative marker is affixed to a stem ending in $-i$ or $-e$, it is realized as $-j o$.
31 obor ([obor] ~ [oßor]) is traditionally a cold, dark and dingy place, where, for example, those caught stealing used to be kept.

The locative marker -r occurs only with demonstrative pronouns.
(30) do-r $\quad p^{h}$ olay lag-e-kjo

DEM.DIST.NVIS-LOC fruit attach-INTR-PST
'There fruits came.'
(31) ga hojo-r to-k
1SG.NOM
'I'm here.'

The locative singular marker -o optionally triggers polysyllabic stem truncation (see Section 2.3.1):

| Nom | Loc | Nom | Loc |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| bo:t |  |  |  |  |

It also triggers final vowel elision (see Section 2.3.1). In the case of difa 'direction’ both dif-o and difa-o are permissible.

| Nom | Loc |  | Nom | Loc |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| lajka | layk-o | 'p.name' | doya | doj-o | 'tree stump' |
| dzaga | dzag-o | 'place' | bagitsa | bagits-o | 'garden' |
| dzila | dzil-o | 'district' | difa | dif-o, difa-o | 'direction' |

With stems ending in other vowels, the locative marker -o is affixed to the final vowel of the noun stem. In fast speech, in noun stems ending in -0 , one does not always hear both the stem final vowel and the locative marker, but when asked, the language consultants provide a long -o and separate the noun stem and the locative marker. When the stem ends with a front vowel, this stem final vowel can be realized as $-j$ before the locative marker.

| Nom | Loc |  | Nom | Loc |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| randole | randole-o | 'widow' | prai | prai-o | 'in-law' |
| nane | nane-o | 'aunt' | dorko | dorko-o | 'skeleton' |
| kui | kui-o | 'dog' | to | to-o | 'face' |
| nukuri | nukuri-o | 'employment' | tsaku | tsaku-o | 'knife' |
| tsit ${ }^{h i}$ | tsit $t^{h}$ i-o | 'letter' | $k^{h} o u$ | $k^{h} o u-o$ | 'food' |

Nouns in the locative are sometimes lexicalized into adverbs. For example, dja:r-o [day-LOc] 'daily'.

### 3.2.4.6 Relationship among the Dative, Possessive and Locative Case Markers

As seen above, the dative, possessive and locative case markers coincide in form to some extent. Nevertheless, there are distributional facts which support the division made here into three different case forms.

Firstly, even if there is some overlap in form, there are also unambiguous exponents of each of the three cases. Thus, (-)pa $\eta$ is an exclusive signal of the dative (after a stem-final vowel).

The locative marker always has the vowel -o, never $-u$. Hence, $-u /-n u$ can only ever signal dative or possessive.

The dative singular suffix never triggers polysyllabic stem truncation, while both the possessive and locative singular suffixes are optionally accompanied by this morphophonological alternation.

Possessive and to some extent locative singular both trigger final vowel elision, which the dative singular does not (since it has a completely different allomorph after vowel-final stems: (-)pəך). With stems ending in $-e$, the stem-final vowel may disappear in the locative (just as in the possessive), but normally it is reduced to a glide $(-j)$ instead.

Table 19 shows some concrete examples of how these differences manifest themselves.
table 19 Dative-possessive-locative with different stem types

| Stem type | Nominative | Dative | Possessive | Locative |
| :--- | :--- | :--- | :--- | :--- |
| Adapted IA | borthay 'tree' | bort $t^{h} a \eta-u$ | bo:t ${ }^{h} a \eta-u$, bo:t $t^{h}-o$ | bo:t $t^{h} a \eta-o$, bo: $t^{h}-o$ |
| $e$-final | ate 'o.brother' | ate(-) paך | atj-o | atj-o |
| C-final | kim 'house' | kim-u | kim-u | kim-o |
| V-final | boba 'father' | boba(-) pəך | bob-o | bob-o |

### 3.2.4.7 Ablative

The case marker $-\partial t / /-t f$ functions as the ablative marker. $-\Delta t f$ occurs with stems ending in a consonant and $-t f$ occurs with stems ending in a vowel or in a nasal. The ablative marker occurs in the following structures: $\mathrm{N}-\mathrm{ABL}, \mathrm{N}-\mathrm{LOC}-\mathrm{ABL}$ and N -poss dok-ABL. ${ }^{32} \mathrm{~N}$-Abl and $\mathrm{N}-\mathrm{loc}-\mathrm{Abl}$ occur only with non-human head nouns, where N-LOC-ABL occurs with nouns whose referents are physically or conceptually viewed as finite, with clearly defined boundaries; N-ABL occurs elsewhere. N -poss dok-ABL occurs only with human head nouns.

| ham-tf <br> dilli-t $f$ <br> $d \partial \eta-t f$ | [where-ABL] <br> [p.name-ABL] <br> [over.there(NVISIBLE)-ABL] | 'from where' <br> 'from Delhi' |
| :--- | :--- | :--- |
| 'from over there' |  |  |

### 3.2.4.8 Comitative

The case marker (-)ray functions as the comitative (or associative) marker, ${ }^{33}$ with a 'together with, along with' interpretation. Unlike other case markers, in

32 Treated as a postposition in the examples: dokty 'from'. The origin of dok in [dok-ABL] is not completely clear. It could be identical to the dok appearing in the personal pronominal dual form dok-suy 'the two (who are not in sight)' (see section 3.3.2.1).
As we will see in Chapter 3, Navakat, too, has an (instrumental/)comitative marker =ray. But unlike Kinnauri, =rə $\eta$ in Navakat has three phonologically conditioned allomorphs:
most cases (-)raך patterns prosodically like an independent word, a postposition rather than a suffix, although it does also sometimes behave like a bound suffix (e.g., $t^{h} a r-r \partial \eta$ lay [ $\mathrm{t}^{\mathrm{h}}$ arə lay] 'the leopard along with the cow').
(33) do rag-u jothay id raksonig an-u

DEM.DIST.NVIS stone-poss under one demon(F) 3SG.ANA-Poss
tif $t^{\text {ha }} a \eta-a:$ raŋ ni-ts du-gjo
seven child-PL COM stay-HAB AUX-PST
'Under that stone a demoness used to live along with her seven children.'
(34) ga ki-n raך daך bjo-k

1SG.NOM 2 SG.H-POSS COM over.there(NVISIBLE) go-1SG
'I went there with you.'
(35) santof thoymi raך bjo
i.name husband Com go.pst
'Santosh went with (her) husband.'

While the comitative marker occurs predominantly with human nouns, there are also instances of (-)rəך occurring with non-human, animate nouns and with inanimate nouns.
(36) mi:=le hathi rəך bjo-gjo
man. $\mathrm{PL}=\mathrm{TOO}$ elephant COM go-PST
'Men, too, went along with the elephant.'
(37) mair raŋ du: gjas-ti-n-a
butter Сом salted.porridge want-FUT-2 $\mathrm{H}-\mathrm{Q}$ 'Do (you) want butter with salted porridge?'
(38) ra:dza gadza=badza rəך ra:ni phjo-mu bə-ki-f
king pomp=ECHO сом queen take.away-INF come-PST-3H
'The king came with pomp etc. (and show) to take the queen.'
$=r a \eta,=t a y$ and $=d a \eta$. In Kinnauri $(-) d a y$, as the comitative marker, occurs only with first and second person pronouns (ay dəŋ/*aŋ-u dəŋ [1sG.nnom сом], ki-n daŋ/*ki-nu daŋ [2SG.H-POSS COM], nijo-n(u) də [1PLI-POSS COM]), where even (-)ra $\eta$ is permissible (e.g. aŋ-rəy/*ay-u raŋ, niŋo-raŋ/niŋo-n(u) rəŋ).
$(-) r a \eta$ is also used to form a coordinate construction with the structure: N $(-) r \partial \eta \mathrm{~N}\left((-)\right.$ case marker $\left.{ }^{34}\right)$.
(39) ama raך boa lo- $\check{l}$-gjo
mother Сом father tell-mDL-pst
'Mother and father told themselves:'
(40) jug raŋ thug haled-o du-gjo
down COM over.above roam-PROG AUX-PST
'(The mouse) was roaming up and down (on all the floors of the house).'
(41) june-raך golsay-u daŋ krab-o krab-o
sun-COM moon-POSS near cry-PROG cry-PROG
'To Sun and Moon, (she) is crying (complaining), crying'

The comitative marker also follows the verb in non-final clauses. The verb in such constructions has either a nominalized verb form or is immediately followed by the manner marker -e. Such non-final clauses have a temporal adverbial interpretation.
(42) naŋ pan-nu raj ty ${ }^{h} a \eta-u \quad$ bo:t $t^{h}-o \quad t s^{h} u \sim t s^{h} u$ over.there(VISIBLE) reach-INF COM boy-DAT tree-LOC tie~PFV du
AUX.PRS
'As soon as (he) reached over there, (he) tied (the) boy to the tree.'
(43) dok ner-o ner-o bad-e raך traval-u khoj-o
then near-LOc near-LOc come-mnr Com sword-DAt turn-PROG du

AUX.PRS
'Then while coming near (closer), he is turning the sword.'

34 Here the case marker could also be a comitative marker [ $\mathrm{N}(-r \partial \eta) \mathrm{N}(-r \partial \eta)]$. For example, dok do kim-o an-u borets raj bore raך ek-e basma-j-o du [then DET house-LOC 3SG.NNOMPOSs brother.in.law COM sister.in.law COM together care.for-TRANS-PROG AUX.PRS] 'Then her/his brother-in-law along with her/his sister-in-law together are taking care of that house'.

### 3.2.4.9 Manner

The case marker -e forms constituents answering questions like: "How?", "In what manner?", "By which means?". ${ }^{35}$

| bal-e thomu | [head-MNR to carry] | 'to carry on head' |
| :--- | :--- | :--- |
| bid-e thomu | [shoulder-MNR to carry] | 'to carry on shoulder' |
| ek-e bjomu | [one-MNR to go] | 'to go together or to accompany' |

ray-e $e^{36} \quad$ [exterior.of.a.shoulderblade-MNR]
bag-e [last.place.in.traditional.dance-MNR]
bal-e [head-mnr] 'first in a queue'
$k a l^{37}-e \quad$ [last.in.a.queue-MNR]

The manner marker -e can be affixed to demonstrative pronouns (e.g. (ho)do (DIST, non-visible), (ho) jo ${ }^{38}$ (PROX), no (DIST, visible)) for expressing, e.g., 'in this manner', 'in that manner'. When $-e$ is affixed to the demonstrative pronouns, the stem final vowel is lost and the resulting forms are hod-e, hoj-e hodz-e and $n e$, respectively.
$\begin{array}{llll}\text { (44) ga hojo-r } & \text { hoj-e } \\ \text { 1SG.NOM } & \text { DEM.PROX-LOC } & \text { DEM.PROX-MNR COP-1SG }\end{array}$
'I am in this (the tree) like this (in this manner).'
(45) nifl ta hoj-e pə~pə

1DU.INCL FOC DEM.PROX-MNR reach~PFV
'(We) two reached (the palace) in this condition.'
(46) ne
$t^{h}$ a lod-o $d u-n$
DEM.DIST.VIS.MNR what tell-prog aUX-2NH
'What are (you) telling like that?'

35 This is an adverbial case form, similar in usage to the Finnish instructive or the Hungarian essive-modal (see Anhava 2010).
36 ray occurs in contexts such as 'I am carrying the bag on my shoulder.'
37 kal refers metaphorically to the bottom part of the body. It occurs in expressions such as 'from head to toe', 'from top to bottom'. kal, however, does not mean 'foot' or 'toe' in Kinnauri.
38 This is, at times, also realized as hodzo.

Further, $-e$ occurs with the third person anaphoric pronoun an (see Section 3.3.2). an-e has an intensifying function ('(all) by him/herself').

```
(47) dok an-e bjo-ge-f
    then 3SG.ANA-MNR go-PST-3H
    'Then (he) himself went.'
```

The manner marker $-e$ also occurs with the IA numeral $e k$ 'one'. $e k-e$ indicates togetherness.
(48) do nif ek-e bjo-gjo

3SG two one-MNR go-pst
'Those two went together.'

Finally, $-e$ is also suffixed to the verbs of non-final clauses. Such clauses have an adverbial interpretation. In many-though not in all constructions, the comitative marker (-)ray follows the non-final verb with $-e$.
(49) gas-o: tfi-e raך id-is timed-u lod-o
garment-PL wash-MNR COM one-ERG girl-DAT tell-PROG
'At the time of washing (their) clothes, one (woman) is telling the girl:'

### 3.3 Pronouns

3.3.1 Demonstrative Pronouns

The demonstrative pronouns are (ho)do [DEM.DIST.NVIS], (ho)no [DEM.DIST. VIS] and (ho)dzo (ho)jo [DEM.PROX] in the singular, and the corresponding plural forms are (ho)do-go:, (ho)no-go: and (ho)dzo-go:, (ho) jo-go:. The shorter forms are used as third-person personal pronouns (see Section 3.3.2).

Plural forms can be used with singular head nouns, as a marker of respect (e.g. do-go: lama: [DEM.DIST.NVIS-PL lama.SG] 'that lama'). The opposite can happen in non-honorific situations, where the singular demonstrative form occurs with plural head nouns, for example, do kim-o: [DEM.DIST.NVIS.SG house-PL] 'those houses', do ts ${ }^{h}$ esmi-go: [DEM.DIST.NVIS.SG woman-PL] 'those women'.

### 3.3.2 Personal Pronouns

|  | Singular | Dual | Plural |
| :---: | :---: | :---: | :---: |
| 1 | $g a(\mathrm{NOM}), a \eta$ (NNOM) | kifay | nijo (EXCL), kifa: (INCL) |
| 2NH | ka | kanif | kano, kanego. ${ }^{39}$ |
| 2H | $k i^{40}$ | kifl, kisi | kino, *kinogo: |
| 3 | do (DIST, NVIS) | doksuy | dogo: ${ }^{41}$ |
|  | no (DIST, VIS) | noksuy | nogo: |
|  | dso (PROX) | dzoksuy | dsogo: |
|  | an (ANA) | anegsuy | anego: |

The isG person pronoun has two forms, referred to here as nominative and nonnominative. ga [1SG.NOM] is used as subject and also to form the ergative: ga-s. The non-nominative pronominal form ay [1SG.NNOM] is used as object, as possessive and as the stem to which other case suffixes are added (including those for dative and possessive). In the reflexive construction, the dative case marker is affixed to the non-nominative pronominal form.

The dative forms of the personal pronouns are as follows:

|  | Singular | Dual | Plural |
| :---: | :---: | :---: | :---: |
| 1 | $a \eta-u$ | $n i j-u$ | niyo-n(u) (EXCL), kifai-n(u) (INCL) |
| 2NH | ka-nu | kanif-u ${ }^{42}$ | kano-n(u) |
| 2H | ki-nu | kis-u | kino-n(u) |
| 3 | do-paך, du ${ }^{43}$ |  | do-go:-n(u) |
|  | по-рәך, пи |  | no-go:-n(u) |
|  | dзo-paŋ, dzu |  | dso-go:-n(u) |

39 Even though both kano and kanego: are possible, in everyday speech kano is more frequent.
In the dictionary by Joshi (1909: 88) the pronoun $k i$ is glossed as ' 2 nd person plural (Tib: khye)'. In Kanashi $k i$ is [2PL].
41 Joshi (1909: 51, 53) provides da 'he/DEF article' and da-gó 'she, PL', dago-gá 'they'.
42 In the direct-elicited material kanif-u and kis-u are found as the [2DU.NH] and [2DU.H] dative forms, respectively, but these forms almost never occur in natural speech. The default pattern is to use the plural forms instead.
43 The third person pronouns with the dative case marker (-)paŋ, are also, at times, realized as du-pәך, nu-pәך and $d \zeta u-p \partial \eta$, i.e., with "double" dative marking.

Both (-)pay and -u are permissible with third person pronouns (e.g. do-paŋ [dэpəŋ] and $d u$ for the 3 SG.DIST pronoun), without any apparent difference in meaning; -nu occurs with 2SG pronouns and - $u$ with dual pronominal forms.

The possessive forms of the personal pronouns are as follows:

|  | Singular | Dual | Plural |
| :---: | :---: | :---: | :---: |
| 1 | $a \eta$ | kijay-u | nijo-n(u) (EXCL) |
|  |  |  | kifai-n $(u)^{44}$ (INCL) |
| 2H | $k i-n^{45}$ |  | kino-n(u) |
| 2 NH | $k a-n^{46}$ |  | kanego:-n(u), kano-n(u) |
| 3 | an (ANA) | anegsuף ${ }^{47}$-u (ANA) | anego:-n(u) (ANA) |
|  | $d u / d o-u$ (NANA) | doksuy-u (NANA) | noksuy-u (NANA) |
|  | $d \xi u$ (NANA) |  | dogor-n(u) (NANA) |
|  | $n u$ (NANA) |  | d 3 ogor- $n(u)$ (NANA) |
|  |  |  | nogo:-n(u) ${ }^{48}$ (NANA) |

As stated above, the third person pronouns are the short forms of the demonstrative pronouns (see Section 3.3.1). As with demonstrative pronouns the plural forms of the personal pronouns (e.g. dogo: and nogo:) can also occur with a singular referent, as a marker of respect.
(50) do-go: doktar to-ke-f

3-PL doctor COP-PST-3H
'S/He was a doctor.'
(51) no-go: doktar to-ke-f

3-PL doctor COP-PST-3H
'S/He was a doctor.'

44 A variant of kifa:-n $(u)$ is kafa:-n $(u)$, with no apparent change in meaning.
45 *ki-nu is not possible here.
$46 \quad$ *ka-nu is not possible here.
47 This, at times, is also heard as [aneksuy].
48 dzogo:-n $(u)$ and nogo: $n(u)$ are also realized as $d \xi u g o:-n(u)$ and nugo:-n(u), without any apparent change in meaning.

```
(52) kino doktar to-ke-tf
    2PL.H doctor COP-PST-2PL.H
    'You (PL) were a doctor.'
```

The most common usage of third-person anaphoric pronouns is as reflexive pronouns (see Section 3•3.4). The third-person anaphoric pronoun also functions as an emphatic pronoun, where it can be preceded by its head noun or a regular (non-anaphoric) third-person pronoun.
(53) do an $t^{h} a s \sim t^{h} a s$ du-gjo

3SG 3SG.ANA hear $\sim$ PFV AUX-PST
'He himself heard (this).'
(54) mohan-is kuay-o la:y fe~fe an-i fi~fi
i.name-ERG well-Loc jump(n) send $\sim$ PFV 3 SG.ANA-EmP die $\sim P F V$ 'Mohan jumped into the well and died.'

In such cases, the case marker may appear both on the head noun and on the anaphoric pronoun.

```
(55) do-s an-is tfe~tje
    3SG-ERG 3SG.ANA-ERG write~PFV
    'He himself wrote (a letter).'
```


### 3.3.2.1 Dual Number in Pronouns

Personal pronouns can be marked for dual number.
kijay functions as the first person dual pronoun.
(56) kijay dsanekay-o ba-te

1DU wedding-LOC come-FUT.1DU
'We (two) will come for the wedding.'
-suy is suffixed to third person pronouns to indicate duality. It also emphasizes togetherness. This suffix is attached to a special stem of the third person pronouns, which ends in -k (dok-suy, nok-suך, djok-suך, anek-suy) or in $-g$ (aneg-suy). These pronominal stems do not occur in any other context, except possibly in the ablative form doktf (see Section 3.2.4.7). Possibly, these represent apocopated plural forms (with assimilative devoicing of $g$ before the $s$ of -suq).

```
dok-su\eta [3SG-DU] 'those two (who are not in sight)'
nok-su\eta [3SG-DU] 'those two (who are in sight)'
dzok-su\eta [3SG-DU] 'these two (who are in sight)'
```

In natural discourse -suy rarely occurs with common nouns. However, in directelicitation language consultants accepted -suj with a few [+human] common nouns.

| ts ${ }^{\text {e }}$ tsats-suy | 'girl-DU' | tete-suy | 'grandfather-DU' |
| :---: | :---: | :---: | :---: |
| dek ${ }^{\text {rataits-su才 }}$ | 'young man-DU' | rudza-suך | 'o.man-DU' |
| * ts ${ }^{\text {e esmi-suy }}$ | 'woman-DU' | * kim-suy | 'house-DU' |
| * mi-sun | 'man-DU' | * bo:thay-suy | 'tree-Du' |

-suy also occurs as a verb indexing marker with third person dual subjects. Its occurrence is, however, not obligatory. More frequently the plural indexing marker occurs also with dual subjects.
(57) sjano mi ray an-u tshesmi dzanekay-o
old man COM 3SG.ANA-POSS woman wedding-LOC
ba-ti-suך
come-FUT-3NH.DU
'The old man and his woman (= his wife) will come for the wedding.'
(58) sjano mi rəŋ tshesmi dzanekay-o ba-suך
old man COM woman wedding-LOC come-3NH.DU
'The old man and woman came for the wedding.'
(59) sjano mi ray tshesmi dyanekay-o ba~ba to-ge-suŋ ${ }^{49}$ old man Сом woman wedding-LOC come~PFV AUX-PST-3NH.DU 'The old man and woman came for the wedding.'
(6o) sjano mi ray thesmi dzanekay-o ba~ba to-ke
old man COM woman wedding-LOC come~PFV AUX-PST
'The old man and woman came for the wedding.'

49 While the plural indexing marker -o: may be affixed to the third-person honorific indexing marker $-\int$ (e.g. ba-ti-fo: [come-FUT-3H-PL] 'They (H) will come.'), -suy [DU] does not occur with this marker $-\int$ (e.g.*ba-ti-f-suy [come-fut-2H-3Nh.du] 'the two of them (н) will come'; *ba~ba to-ke-f-sug 'the two of them (н) came').

The numeral nif 'two' occurs, at times, after the second and third person pronouns to indicate duality.

| do-nif | [3SG-two] | 'those two' |
| :--- | :--- | :--- |
| $k a-n i f$ | [2SG.nh-two] | 'you two' |
| $k i f l,{ }^{50}$ ki-nif | [2SG.H.two], [2SG.H-two] | 'you (H) two' |

Without a preceding pronoun $n i f \iota^{51}$ has a first person dual inclusive interpretation.
(61) nifi dzanekay-o ba-ti-tf

1DUI wedding-LOC come-FUT-1PLE
'We (two) will come for the wedding.'
3.3.3 Interrogative Pronouns and Adverbs

Some interrogative pronouns (and adverbs) in Kinnauri are:

| hat | 'who, which' | $t^{h} u, t^{h} u^{52}$ | 'why' |
| :--- | :--- | :--- | :--- |
| ham | 'where' | teta, te, tetra | 'how much, many' |
| $t^{h} \partial d, t^{h} a^{53}$ | 'what' | teray, tetray | 'when' |
| hala | 'how (action)' | hales | 'how (quality)' |

te 'how much' is frequently repeated (i.e., te $\sim t e$ [te~ECHO]). For example, a group of customers in a shop can use te $\sim t e$ to ask how much each one of them owes. tetra 'how much' is used when asking about one specific object. teray 'when' is an open question. The speaker does not have any specific time-frame in mind. It could be today, tomorrow, in one month or one year or in distant future. When there is a more specific time-frame in mind (e.g. 'after lunch today', 'before 1opm'), tetray is used instead. See also Section 5.2.

### 3.3.4 Reflexive Pronouns

As mentioned above, Kinnauri has distinct subject and non-subject pronominal forms for the first person singular ( $g$ a vs. $a \eta$; see Section 3.3.2), and it is the latter form which is used as the first-person singular reflexive pronoun. In the

50 Upon investigation, language consultants accepted its detailed form as ki-nif.
51 While nif in nifi is very likely the same as nif 'two', the analysis of the final $-i$ is unclear. Note that $n i f i$ allows the addition of the emphasis marker -i (i.e., $n i f l-i$ [1DUI-EMP]).
52 Both $t^{h} u$ and $t^{h} u$ are possible here. $t^{h} u$ is, however, more frequent in my material.
$53 \quad t^{h} a$ 'what' also functions as indefinite pronoun 'someone'.
third person, the anaphoric pronouns an, anegsuy and anego: are used as the reflexive pronouns. In all other cases the same pronominal forms occur in both subject and non-subject positions (including with the ergative marker). In the reflexive pronoun construction, the dative marker is affixed to the pronoun in the direct object position.
(62) тау-о ga-s ay-u sa-k
dream-LOC 1SG-ERG iSG-DAT kill-1SG
'In the dream I kill myself.'
(63) maŋ-o kifay-is kifay-u sa~sa
dream-LOC 1DU-ERG 1DU-DAT kill~PFV
'In the dream we (two) killed ourselves.'
(64) maŋ-о nijo-s nijo-nu sa~sa
dream-LOC 1PLE-ERG 1PLE-DAT.PL kill~PFV
'In the dream we killed ourselves.'
(65) do-s an-u-i lo-kjo

3SG-ERG 3SG.ANA-DAT-EMP tell-PST
'He told himself.'
(66) do-go:-s ane-go:-n(u) tay~tay

3-PL-ERG 3PL.ANA-PL-DAT.PL observe~PFV
'They looked at themselves.'

As will be discussed in Section 4.1.3.3, the middle voice marker $-\int \iota$ also occurs in the reflexive construction. As the examples (67-68) illustrate both the reflexive pronoun and the middle marker $-f \iota$ can co-occur in the same clause.

> (67) niŋo niŋo-nu $\quad k^{h j a-f-o} \quad d u-t f$
> 1PLE.NOM 1 1PLE-DAT.PL see-MDL-PROG AUX-1PLE
> 'We (EXCL) saw ourselves (in the mirror).'
(68) kifa: kifa:-nu khja-foo to-me

1PLI.NOM 1PLI-DAT.PL See-MDL-PROG AUX-1PLI
'We (INCL) saw ourselves (in the mirror).'

### 3.4 Adjectives

Adjectives in Kinnauri precede their head nouns.
(69) Jum ufk kim-o:
three old house-pl
'Three old houses'
(70) do-s thog ray rok gas-o: gadz-is du 3SG-ERG white COM black garment-PL wear-PFV AUX.PRS 'He has worn black and white clothes.'
(71) $t^{\text {h }} a y$ ka bo:la: ga:ray-u ner-o $t^{h} a$-bjo child 2 NH rough river-poss near-LOC PROH-go ‘Child, don't go near the rough river!'
(72) dam gas-o: tan-a: tay~tay good garment-PL jewelry-PL observe $\sim$ PFV '(She) looked at nice clothes and (pieces of) jewelry.'
(73) imanda:r thay dake ma-tan-ts
honest boy problem nEG-observe-HAB
'The honest boy does not have (any) problem(s).'

As is the case with nouns, most adjectives, too, are mono- or disyllabic in Kinnauri. As with nouns, some disyllabic adjectives, too, end in -ay.

| dam | 'good' | $t^{\text {hausay }}$ | 'bottom' |
| :--- | :--- | :--- | :--- |
| ka:g | 'bitter' | ajãrraך | 'dark' |
| bok | 'hot (objects)' | tsutkay | 'quiet' |

Quantifiers such as 'all', 'whole', etc., pattern like adjectives.

| dam batay | [good news] | 'good news' |
| :--- | :--- | :--- |
| tseik $k^{h}$ iray | [all milk] | 'all milk' |
| gui raitij | [whole.duration night] | 'whole night'54 |
| far-e tsh etsats | [beautiful-F girl] | 'beautiful girl' |
| dek ${ }^{h}$ res mi | [male man/person] | 'male (of any age)' |

[^22]Modifying adverbs, such as val 'much', bodi 'more, much (CNT)', goma 'very', san 'some' and kjalek' ${ }^{h}$ 'enough, sufficient' precede adjectives.
(74) Jiml-o ${ }^{55}$ mosam val-i dam
p.name-Poss weather much-EMP good
'Shimla's weather is very good.'
(75) do-mja ${ }^{56}$ san-ts dam hatf-is

DEM.DIST.NVIS-day some-DIM good become-PFV
'That day (she) got a bit better.'

### 3.4.1 Adjective Inflection

Used attributively, i.e. in combination with a head noun, adjectives in Kinnauri behave similarly to IA adjectives with respect to gender inflection, and optionally also with respect to number marking. As in IA languages, Kinnauri distinguishes between a category of "invariable" adjectives and one of "variable" adjectives (Masica 1991: 250-251).

### 3.4.1.1 Invariable Adjectives

The adjectives in this category do not inflect for gender and/or number of their head nouns. In the following examples, the same adjectival form occurs with singular and plural head nouns, as also with male and female head nouns.

Invariable adjectives: gender and number
sjano mi 'old man' sjano ts ${ }^{h}$ esmi 'old woman'57
daldis mi 'poorman' daldistshesmi 'poor woman'
saukarmi 'rich man' saukarts ${ }^{h}$ esmi 'rich woman'
brat mi
teg mi
fufkes mi
ba:dur mi
tsolak mi
marit ${ }^{h} a \eta$
'stingy man' brait tshesmi 'stingy woman'
'older man' teg tshesmi 'older woman'
'clean man' fufkes tshesmi 'clean woman'
'brave man' ba:dur ts ${ }^{h}$ esmi 'brave woman'
'clever man' tsalak tshesmi 'clever woman'
'weak boy' mari ts ${ }^{\text {e } e s m i ~ ' w e a k ~ w o m a n ' ~}$
55 Also occurs as: fimla-u [p.name-poss].
56 mja 'day' occurs in some compounds, forming temporal adverbs, e.g., domja 'that day', nabja 'the next day' (nab 'tomorrow'), tormja 'these days' (toro 'today'), imja 'once, at one time' (id 'one'), hunnja 'now then' (hun 'now'). It also occurs at the end of a clause where it functions as a tag question marker (e.g. kasi ta ranon mja 'You yourself told (me that), isn't it?', fora:mora: bjots mja 'thief etc. goes (into the house), isn't it?').
57 sjano 'old' occurs only with human head nouns. ufk 'old' occurs with inanimate objects (e.g. ufk kim 'old house').

| muftin thay a:lsi $t^{\text {h }}$ an | 'strong boy' 'lazy boy’ | muftin ts ${ }^{h}$ esmi a:lsi ts ${ }^{h}$ esmi | 'strong woma ‘lazy woman’ |
| :---: | :---: | :---: | :---: |
| $t^{\prime}$ | 'good boy' | dam ts ${ }^{\text {e }}$ esm | good |
| it thay | 'naked boy' | salgi ts ${ }^{\text {esmi }}$ | 'naked wom |
| lin th $a y$ | 'blind boy' | ãdolin ts ${ }^{\text {hesmi }}$ | 'blind woman' |
| - | 'rich boys' | saukar ts ${ }^{\text {e }}$ esmi-o: | 'rich wome |
| dur thay-o | 'brave boys' | ba:dur ts ${ }^{\text {hesmi-o }}$ | rave wom |
| ay-o | 'poor boys' | daldis ts ${ }^{\text {h }}$ esmi-o: | 'poor women' |
| rit $t^{h} a y-o$ : | 'weak boys' | mari ts ${ }^{\text {esmi- }}$ | k |
| in thay-o: | 'strong boys' | muftiy ts ${ }^{\text {e }}$ esmi-o: | ' |
| a:lsi thay-o: | 'lazy boy | a:lsi ts ${ }^{\text {e }}$ esmi | zy wo |
| V-o | 'good boys' | dam ts ${ }^{\text {hesmi- }}$ | 'good |
| $t^{\text {hay-o }}$ | 'naked boys' | salgi ts ${ }^{h}$ esmi- | naked women' |
| doliy thay-o: | 'blind boys' | ãdoliy ts ${ }^{\text {e }}$ esmi-o: | 'blind women' |

### 3.4.1.2 Variable Adjectives

Some adjectives of the variable category have distinct adjectival forms with animate and inanimate head nouns. E.g., for 'black', rok is the form used with inanimate nouns, while with humans (e.g. 'black, dark-skinned (man woman)'), we get either rokalo (M) and rokale ( F ), or the adjective payk 'dark-skinned (man/woman)'.

Adjectives in this category display complex behavior. In the following examples adjectives can optionally inflect for number, but not for gender. The adjective in this sub-set takes the plural marker -o:/-go: or $-e$ : (with both masculine and feminine head nouns). As with nouns, which adjectives take -e: or -or/-go: is lexically determined. The plural marker is optional on adjectives in this set, however.

| gato thay | 'small boy' | gato ts ${ }^{\text {hetsats }}$ | 'small girl' |
| :---: | :---: | :---: | :---: |
| rapkt ${ }^{\text {a }}$, | 'tall boy' | rayk ts ${ }^{\text {e }}$ tsats | 'tall girl' |
| nakits thay | 'thin boy' | nakits ts ${ }^{\text {esmi }}$ si | 'thin woman' |
| soukarmi | 'rich man' | soukar ts ${ }^{\text {e }}$ esmi | 'rich woman' |
| teg mi | 'big man' | teg ts ${ }^{\text {esesmi }}$ | 'big woman' |
| braitmi | 'stingy man' | brait ts ${ }^{\text {esmi }}$ | 'stingy woman' |
| gato-go: ty ${ }^{\text {a }}$ - o - | 'small boys' | gato-go: tshetsats-o: | 'small girls' |
| rayk-e: thay-o: | 'tall boys' | rajk-e: ts ${ }^{\text {e }}$ tsats-o: | 'tall girls' |
| nakits-e: thay-o | 'thin boys' | nakits-e: ts ${ }^{\text {esesmi-or }}$ | 'thin women' |
| soukar-e: mi-go: | 'rich men' | soukar-e: ts ${ }^{\text {e }}$ esmi-o: | 'rich women' |
| teg-e: mi-go | 'big men' | teg-e: ts ${ }^{\text {e }}$ esmi-o: | 'big women' |
| brait-e: mi-go: | 'stingy men' | brait-e: ts ${ }^{\text {esmi-os }}$ | 'stingy women' |
| rajk-e: $t^{\text {hay }}$-o | 'tall boys' | rajk-e: ts ${ }^{\text {e }}$ tsats-o: | 'tall girls' |

Distinct from this, some adjectives which take the adaptive marker - $V s$ with masculine singular head nouns, also permit inflection for the natural gender of the animate head noun. The masculine marker in such instances is - $a$ and the feminine marker is $-e$. As can be seen in the examples below, with masculine head nouns both the default adjectival form with the adaptive marker and truncated adjective with the masculine marker - $a$ are permitted. The corresponding feminine forms take the suffix $-e$.
mothes dek ${ }^{h}$ raits, 'fat y.man' mot ${ }^{h}-e t^{h}$ hetsats 'fat y.woman'
mot ${ }^{h}-a^{58}$ dek ${ }^{h}$ ra:ts
latasmi, lat-ami 'mute man' lat-e ts ${ }^{h}$ esmi 'mute woman'

$t^{h} o t-a t^{h} a y \quad$ height)'
kan-es thay, 'blind boy' kan-e ts ${ }^{h}$ esmi 'blind woman'
kan-a thay
fares mi 'handsome man' far-e tshesmi 'handsome woman'
In this set of adjectives, the singular and plural forms are the same (cf. the examples above and below).
moth ${ }^{h}$ des ${ }^{h}$ ra:ts-o:, 'fat y.men' mot ${ }^{h}-e t^{h}$ etsats-o: 'fat y.women' mot ${ }^{h}$-a dek ${ }^{h} r a: t s-o:$
lat-a dek ${ }^{h} r a: t s-o: \quad$ 'mute y.men' lat-e(-go: $)^{59}$ ts ${ }^{h}$ esmi-or: 'mute women'
thot-a thay-o:, 'short boys' $t^{\text {hot-e ts }}$ hesmi-go: 'short women' $t^{h}$ otas thay-o:
kan-ami-o: 'blind men' kan-e ts ${ }^{\text {hesmi-or }}$ 'blind women'
It is possible that gender as a grammatical category is finding its way into Kinnauri. If a particular adjective which inflects for gender can occur with inanimate head nouns, the inanimate head noun takes the feminine adjectival form. For example, far-e: dani(ts) 'beautiful hill'; far-e: rag 'beautiful stone'. Even though adjectives which inflect for number with animate head nouns in principle permit number agreement with inanimate head nouns, this is only marginally acceptable (ufk-e gas-o: 'old garments'; rok(-e) patray-o: 'black leaves').

58

The masculine suffix $-a$, although reminiscent of the plural marker $-a$ :, is more likely the result of IA influence.

As seen in the examples above, the plural form of adjectives which permit number inflection may also occur with explicit head nouns. But if the identity of the head noun is clear in a given context, the head noun need not occur explicitly. The form of the adjective remains the same irrespective of if the head noun is there explicitly or not. When an adjective occurs without a head noun, the same nominal inflectional endings are affixed to the adjectives.
(76) tseik-u-i dzai-mu ran-gjo
all-DAT-EMP eat-INF give-PST
'(They) gave (food) to everyone to eat.'
3.4.2 Predicative Adjectives

Apart from adjectives functioning as a modifier to a nominal argument, they also occur as the second argument in predicative constructions. As seen in example (74) above, the copula is not obligatory.
(77) ga dam to-k

1SG.NOM good COP-1SG
'I (M,F) am good (well).'
(78) ga mothe to-k

1SG.NOM fat.F COP-1SG
'I (F) am fat.'
(79) ga mothes to-k

1SG.NOM fat.M COP-1SG
'I (м) am fat.'
(8o) nino mot ${ }^{h} a:$ to- $t f$
1PLE fat.M.PL COP-1PL
'We (м) are fat.'
(81) nino mot ${ }^{h}$ e-go: to-t $f$

1PLE fat.F.PL COP-1PL
'We (F) are fat.'
3.4.3 Degrees of Comparison

Adjectives have no comparative forms. Comparison is expressed by affixing a combination of the locative marker $(-o)$ and the ablative marker $\left(-t^{\prime}\right)$ to the standard of comparison.
(82) sjo dakhay-o-tf sost-a: du
apple grape-LOC-ABL cheap-PL cop.Prs
'Apples are cheaper than grapes.'
(83) hojo mi tshesmi-o-tf soukar du

DEM.PROX man woman-LOC-ABL rich COP.PRS
'This man is richer than the woman.'
(84) bagits-o sjo dzaygal-o seo-tf em du orchard-poss apple forest-poss apple.LOc-ABL sweet cop.Prs 'The orchard's apples are more tasty than wild apples.'

## (85) hojo thay hodo-tf gato-ts du <br> DEM.PROX child DEM.DIST.NVIS-ABL small-DIM COP.PRS <br> 'This child is younger than that one.'

The superlative is expressed by putting either tseik-o-tf [all-LOc-ABL] or $d z o$ [sup] before the adjective.
(86) dzo tseik-o-tf teg ${ }^{60}$ garray du

3SG.PROX all-LOC-ABL big river cop.prs
'This is the longest river.'
(87) do tseik-o-tf takra: du

3SG all-LOC-ABL strong COP.PRS
'He is the strongest amongst all.'
(88) id fare-ts pja-ts dzo gato-ts ate-o jums
one beautiful.F-DIM bird-DIM SUP small-DIM brother-poss after
bad-o du-gjo
come-PROG AUX-PST
'One beautiful bird was coming after (following) the youngest brother.'

### 3.5 Numerals

Like adjectives, numerals in Kinnauri precede their head nouns. Modifying adjectives occur between a numeral and the head noun. In Kinnauri the plural marker may also appear in a noun phrase which contains a numeral (89), although its appearance is optional with numerals (90).

6o bodi 'much' can occur here instead of teg, if the sentence refers to the amount of water.
(89) Jum ufk kim-o:
three old house-PL
'Three old houses'
(90) hodo nif pholay lig-fis bjo-o du
dem.dist.nvis two fruit put-mdl-pfv go-prog aux.prs
'Having taken those two fruits, (he) is going.'
3.5.1 Nondecomposable Numerals

The numerals in Kinnauri which are not (synchronically) decomposable into simpler parts-"atoms" in the sense of Greenberg (1978)—are those for 1-11, and the numerals for 'twenty', 'hundred' and 'thousand'. These numerals are as follows.

| id | 'one' | tug: rug 61 | 'six' | sigid | 'eleven' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| nif | 'two | (s)tif | 'seven' | nidza | 'twenty' |
| fum, sum | 'three' | re | 'eight' | ra | 'hundred' |
| p | 'four' | (s)gui | 'nine' | hadzar | 'thousand' |
| ja | 'five' | se | 'ten' |  |  |

sigid 'eleven' and nidza 'twenty' are in all likelihood historically derivable from the combinations se 'ten' plus id 'one' and nif 'two' plus se 'ten', respectively. Except for the IA loanword hadzar 'thousand', the nondecomposable numerals in Kinnauri are of ST origin. See also Chapter 5 for numerals in other ST varieties of Kinnaur. In modern times the use of Hindi numerals is gaining ground.

### 3.5.2 Complex Numerals

The remaining numerals are complex, formed from nondecomposable numerals (and recursively from other complex numerals) by formal devices corresponding to the arithmetic operations multiplication, addition and (rarely) subtraction.

The hundreds are formed by multiplication, formally expressed as juxtaposition of the terms for $2-9$ and $r a$ 'hundred', e.g., $\eta$ ara 'five hundred'.

There are two ways of forming numerals higher than 1,000, corresponding to the patterns sigidra [eleven hundred] and hadzar-is ira [thousand-INs one.hundred] ' $1,10{ }^{\prime}$ '. 62

[^23]The Kinnauri numeral system is basically vigesimal, i.e., the interval between 20 and 100 is subdivided into twenties, not into decades, e.g. nidz-o sigid [twenty-NLC eleven] 'thirty-one'. The words for the decades $30-90$ are as follows.

| nidzo se | 'thirty' fumnidza | 'sixty' | ponidza | 'eighty' |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| nifnidza | 'forty' | fumnidzo se | 'seventy' | ponidzo se | 'ninety' |
| nifnidzo se | 'fifty' |  |  |  |  |

The words for the units (1-19) are added after 'ten' and the terms for twenties, with an intervening connecting morph $-o /-a(:)(-\mathrm{NLC})$. This could be an original possessive or locative suffix. ${ }^{63}$ E.g., s-a pa/s-o pa [ten-NLC four] 'fourteen', s-o ya [ten-NLC five] 'fifteen', nidz-o s-o rug [twenty-NLC ten-NLC six] 'thirtysix', nif-nidz-o gui [two-twenty-NLC nine] 'forty-nine', fum-nidz-o s-a pa [three-twenty-NLC ten-NLC-four] 'seventy-four'.

Complex numerals in Kinnauri can also be formed by subtraction. The smaller subtracted value appears before the larger base value (a decade), with the expression ma(:)ts [NEG.Cop] 'without' (see Section 4.6.1)—or alternatively the IA loanword kam 'less'—between the two expressions. E.g, ya maits fum-nidza [five NEG.COP three-twenty] 'fifty-five', fum maits pa-nidz-o se [three NEG.COP four-twenty-NLC ten] 'eighty-seven'.

## 4

 The Verb ComplexThe verb complex in Kinnauri exhibits one of the following structures.

Copula construction: (NEG-)COP(-TNS)-IDX
Non-copula (PROH/NEG-)V(-O.IDX/MDL)-TNS-IDX constructions:

N Vlight-tns-Idx
V.pfV Vlight(-O.idx/mDL)-TNs-IDX

V(-O.IDX)-ASP (AUX(-TNS)-IDX)
N Vlight-asp (aux(-TNS)-IDx)
V.pfV Vlight(-O.IDX)-ASP (AUX(-TNS)-IDX)

63 Since ultimately only two items are involved-se 'ten' and nidza 'twenty' -we could perhaps more economically simply posit the combining allomorphs sa(:)-/so- and nidzoinstead.

In non-copula constructions the following combinations are attested in our material: ${ }^{64}$

```
V-ja:-MDL(-TNS)-IDX V-ja:-O.IDX(-TNS)-IDX
V(-MDL)-TNS-IDX V-O.IDX-TNS-IDX
V-ed-TNS-IDX
V.INTR(-TNS)-IDX
```

In the following sections, we describe the structure of verb lexemes, including valency-changing morphology, subject and "object" indexing, and the two main types of construction listed above, copula and non-copula constructions with their accompanying tense and aspect markers. Negation and imperatives/prohibitives are treated in separate sections.

### 4.1 Verb Lexemes and Their Structure

4.1.1 Simplex Verbs

The simplex verbs, like nouns and adjectives, are mostly mono- or disyllabic. There are no formal characteristics which distinguish different semantic classes of verbs, as can be seen from the following examples.

| пnu | 'to be hungry' | krijmu | 'to shiver' |
| :---: | :---: | :---: | :---: |
| $p^{\text {hasmu }}$ | 'to vomit' | gismu | 'to sneeze' |
| bjomu | 'to go' | bәпnи | 'to come' |
| bragmи | 'to chew' | korrmu | 'to dig' |
| tипти | 'to drink' | malmu | 'to cut' |
| tshunnu | 'to tie' | timu | 'to wash' |
| gоти | 'to understand' | gја:mи | 'to want' |
| пети | 'to know' | tsalmu | 'to feel, to think' |
| tатти | 'to smell' | $t^{\text {haŋmи }}$ | 'to touch' |
| kипnи | 'to call' | lonnu | 'to tell. $\mathrm{N} \mathbf{1} / 2 \mathrm{O}$ ' |

Unlike other ST languages of this region such as Bunan and Navakat, verbs in Kinnauri do not have different verb forms for honorific and nonhonorific subjects, beyond the use of the plural marker with singular subjects.

64 There are no instances of V-ed-mDL-IDx, V-ed-o.IDX-IDX or V-MDL-ed-IDx.

### 4.1.2 Complex Verbs

Complex—multi-word—verbs are frequently encountered in Kinnauri. One of the two main types consists of a nominal argument followed by a light or support verb. A frequently occurring verb in such constructions is lannu'to do, to make'. The nominal argument in this construction contains the primary semantic content, while the verb takes the verbal inflectional endings.

| madzbur lan-nu | [helpless( N ) make-INF] | 'to force' |
| :---: | :---: | :---: |
| bok lan-nu | [ $\operatorname{warm}(\mathrm{N})$ make-INF] | 'to warm' |
| pudza lan-nu | [prayer(N) make-INF] | 'to pray' |
| pudza ma-lan-nu | [prayer(N) NEG-make-INF] | 'to not pray' |
| saph lan-nu | [clean(N) make-IN F] | 'to clean' |
| ipaŋ lan-nu | [save(N) make-INF] | 'to save' |
| mana lan-nu | [refuse( N ) make-INF] | 'to refuse' |

Unlike instances where lannu 'to make' functions as a lexical verb, in this complex verb construction the dative marker does not occur after the nominal component of the verb complex (e.g. after madzbur 'helpless( N )' in madzbur lannu 'to force'), suggesting that the noun (madzbur 'helpless( N )' here) forms part of the complex verb. Further, in many cases an additional argument occurs in such constructions, which optionally can take the dative marker (91-92).
(91) ama-s kim-u saph lan-a-f
mother-ERG house-DAT clean( N ) make-PST-3H
'Mother cleaned the house.'
(92) ama nif-u tseik-is-i ase tar-tf-o du mother two-DAT all-ERG-EMP torture(N) keep-1/20-PROG AUX.PRS '"Mother, everyone is torturing us (two)."'

The negative marker (including the prohibitive marker) is, however, affixed to the verb (e.g., pudza ma-lan-nu [prayer(N) NEG-make-INF] 'to not pray').

The compound verb construction is the other frequently used complex verb construction in Kinnauri. Here the main verb (in the perfective) is followed by a light or vector verb such as nimu 'to stay', rannu/kemu 'to give', bjomu 'to go', ta:mu 'to keep' or fennu 'to send'. The vector verb may be followed by an auxiliary. Each vector verb adds a specific semantic dimension to the main verb. For example, the vector verb nimu 'to stay' indicates the continuation of the state indicated in the main verb. ${ }^{65}$ The verbs Sennu 'to send' and rannu/kemu 'to give'

65 Cf. Navakat dug and sdod (see Chapter 3).
as vector verbs indicate the completeness or totality of the action expressed in the main verb. All instances of these vector verbs involve active main verbs. ${ }^{66}$

> (93) kim-o [tof-is ni-ts du-gjo]
> house-LOC [sit-PFV STAY-HAB AUX-PST]
> '(He) used to sit at home.'
(94) do-s $k^{h} o u$ [dza:~dza: $\left.\int e \sim \int e\right]$

3SG-ERG food [eat~PFV SEND~PFV]
'He ate (up everything).'

### 4.1.3 Valency Changing Mechanisms

Transitivity is determined only by means of formal criteria-transitive verbs can take objects. Objects do not need to be explicitly present in order for a verb to be considered transitive. Intransitive verbs take nominative subjects. Subjects of transitive verbs can be either in the ergative or in the nominative. Objects can be in the dative or in the nominative. The case marking possibilities in simple transitive clauses (except with ditransitive verbs and the verb 'to say') with explicit A and O are (nominative left without indication):

| A-erg | O-dat | V |
| :--- | :--- | :--- |
| A-erg | O | V |
| A | O | V |
| A | O-dat | V |

(95) ra:ni-s do nif-u taך-gjo
queen-ERG DEM.DIST.NVIS two-DAT observe-PST
'The queen saw those two.'
(96) ra:m-is rak tuy~tuך
i.name-ERG alcohol drink~PFV
'Ram drank alcohol.'
(97) ama pol-e: lan-ts
mother fried.bread-PL make-нАв
'Mother makes (prepares) fried bread.'

66 Cf. tay in Navakat.
(98) hat-u ra:dza ${ }^{67}$ tsum-ta
who-Dat king catch-FUT
'Whom will (they) catch (as their) king.' (Who will become the king?)

```
(99) a\eta-u val-i dsã\etak bo
    1SG-DAT much-EMP very warm (weather) come.PST
    'I felt very hot.'
```

In ditransitive clauses where both a direct object and an indirect object occur, the indirect object gets the dative marker, and the direct object remains in the nominative.

(102) do-s u:-nu ${ }^{68}$ ti ran-o- $\int$

3SG-ERG flower-DAT.PL water give-PST-3H
'She gave water to the flowers (plants).'
(103) do-s u:-pəך ${ }^{69}$ ti ran-o- $\int$

3SG-ERG flower-DAT water give-PST-3H
'She gave water to the flower (SG).'
4.1.3.1 (De)transitivizing Voicing Alternation

Most Sino-Tibetanists posit an original de-transitivizing prefix * $n$ - whose reflex in modern forms is voicing of the root-initial consonant. In a small set of verbs, when the intransitive verb form begins with a voiced obstruent (a stop or an affricate), the corresponding transitive verb form begins with a voiceless consonant. This is also observed in Kinnauri, although not as a productive process.

[^24]In such verbs the transitive marker -ja: is not permitted (see Section 4.1.3.4.1 for -ja:).

| V (INTR) | V (TR) |  |
| :--- | :--- | :--- |
| bajmu | paŋmu | 'to fill' |
| bogmu | pogmu | 'to burn' |
| grumu | krumu | 'to burn (food items)' |
| bannu | pannu | 'to cook' |
| bjugmu | pjugmu | 'to blow off fire' |
| gjulmu | $k^{h}$ hulmu | 'to scrape' |
| dzogmu | togmu | 'to drip' |
| bralmu | $p^{h}$ ralmu | 'to fall, to fell' |

The middle marker - $\int \iota$ (see Section 4.1.3.3), too, can be affixed to some transitive verbs of this set to decrease their valency, e.g., $p o g-\int \iota-m u$ to get burnt by inadvertently touching a hot pan' < pogmu 'to burn (TR)'.

### 4.1.3.2 The Transitivizing Prefix s-

There are some Kinnauri transitive verb forms in the speech of older consultants (or attested in the examples provided in older literature) which contain the prefix $s$-. For example, (s)kvamu 'to jump (тR)', (s)tugmu 'to push'. Bailey (1920) provides the following: tuŋmū 'to drink' : stuŋmū 'to cause to drink, give to drink'. In all such cases, the forms without the prefix also occur as independent transitive verbs. It is noteworthy that some language consultants (especially the younger ones) use and recognize only the variants without the prefix $s$ -

### 4.1.3-3 The Middle Marker - fi

Kinnauri has a multifunctional verbal suffix $-\int \iota$ with cognates in several other ST languages. ${ }^{70}$ This suffix is realized as $-\int$ when the suffix following it starts with a vowel. The $-\int$ in $-\int \iota$ never assimilates to surrounding consonants or vow-

70 Similar morphemes with related meanings have been reported for several other ST languages. E.g. $-\int i($ Byangsi; Willis Oko 2019: 275), -sil-xi (Darma; Willis Oko 2019: 273ff.), -si (Thulung Rai; Lahaussois 2003). LaPolla (1996) also reports similar morphemes in other ST languages: $x$ (Rawang/Dulong), -sij (Limbu), (na) ci (Bantawa), sit (Thulung), si (Khaling), $-s$ (Rongpo), $-s u$ (Padam-Mishing) and $-s$ (Nishi).
els (e.g. with regard to voicing), which otherwise is a common phenomenon in Kinnauri. With a restricted set of verbs, however, it is realized as $-t f$, and not as - $\int i$ (e.g., legmu 'to burn', legtfimu [lektfimu] 'to get burned', but not *legfimu). With all other verbs $-t f$ as the middle marker is not permitted. The distribution of the middle marker $-\int \iota$ and $-t f i$ is not morphophonologically conditioned. It is unclear why some verbs take $-t i l$, and not the default $-\int i$. It is possible that forms with $-t f$ are borrowed from some other language.

Kinnauri $-\int \iota$ expresses functions which are typically associated with the middle marker, as shown below, but it also occurs in some other, distinctly nonmiddle constructions. However, regardless of the varying semantics of the verbs containing - $\int$, it will be consistently referred to and glossed as "middle" (MDL) in this chapter, including the word list in Appendix 2A.
(104) sapes-is radha-pə tok~tok
snake-ERG i.name-DAT sting.PFV
'The snake stung Radha.'
(105) ga tok- $l-s$ to-k

1SG.NOM sting-MDL-PFV AUX-1SG
'I am bitten (by a snake).'
(106) sapes-is ay-u tok-tf-is
snake-ERG 1SG-DAT sting-1/20-PFV
'The snake stung me.'

The middle marker occurs with both ST and non-ST verbs. Among non-ST verbs, the focus here will be on IA loans. With IA verbs, as can be seen in the examples provided here, it occurs only on verb stems which contain the transitive marker -ja: (see Section 4.1.3.4.1).

| ST/IA | $\mathrm{V}(\mathrm{TR})$ | V(MDL) | V (INTR) |  |
| :---: | :---: | :---: | :---: | :---: |
| ST | ргати | prafimu |  | 'to spread' |
| ST | timu | tifimu |  | 'to wash' |
| ST | $t^{\text {hannu }}$ | $t^{\text {hafimu }}$ |  | 'to drop' |
| ST | sərmu | sarfimu |  | 'to wake up' |
| IA | poltja:mu | poltja:/imu | poltennu | 'to turn (around)/roll' |
| IA | rokja:mu | rokja:fimu | rukennu | 'to stop' |

Kinnauri has a reflexive construction involving a transitive verb and a reflexive (anaphoric) pronoun, with the verb form remaining the same in a regular transitive clause. Most likely this reflexive construction in Kinnauri is due to its contact with IA languages.

$$
\begin{array}{lll}
\text { (107) } & d o-s \quad a n-u \quad k^{h} j o-o \quad d u \\
& \text { 3SG-ERG } & \text { 3SG.ANA-DAT see-PROG AUX.PRS } \\
\text { 'S/He is seeing her/himself (in the mirror).' }
\end{array}
$$

As in many other ST languages, a reflexive reading in Kinnauri can also be accomplished by suffixing the middle marker $-\int \iota$ to a transitive verb. The reflexive pronoun is optional in constructions with the middle marker ( $67-68$, repeated here slightly modified as 108-109).

```
(108) ni\etao (ni\etao-nu) khja-f-o du-tf
    1PLE.NOM (1PLE-DAT.PL) See-MDL-PROG AUX-1PLE
    'We (excl) are seeing ourselves (in the mirror).'
```

```
(109) kifa: (kifa:-nu) k
```

(109) kifa: (kifa:-nu) k
1PLI.NOM (1PLI-DAT.PL) See-MDL-PROG AUX-1PLI
1PLI.NOM (1PLI-DAT.PL) See-MDL-PROG AUX-1PLI
'We (INCL) are seeing ourselves (in the mirror).'

```
    'We (INCL) are seeing ourselves (in the mirror).'
```

The middle marker occurs also in reciprocal constructions.
(110) do-go: me ama-bua tay $\sim$ tay du
3-PL yesterday mother-father observe~PFV AUX.PRS
'Yesterday they looked at (someone's) parents.'

| (111) | do-go: me tay-fis du $\quad d u$ |
| :--- | :--- |
|  | 3-PL yesterday observe-MDL-PFV AUX.PRS |
|  | 'Yesterday they looked (at one another).' |

The reciprocal construction with $-\int \ell$, too, can optionally contain the anaphoric pronoun.
(112) tshets-o: (ane-go:) bait-jai-foo du woman-PL ANA-PL talk-TR-MDL-PROG AUX.PRS 'The women are talking among themselves.'

## (113) thay-o: (ane-go:) kul-foo du

child-PL ANA-PL beat-MDL-PROG AUX.PRS
'The children are fighting among themselves.'

As in several other ST languages, in Kinnauri too, $-j \iota$ as the middle marker is used to decrease verbal valency. Thus, the ergative and the dative marker are not permitted on the core arguments of a transitive verb when the middle marker - $\int \iota$ has been added to it, while with the same verb without the middle marker, the core arguments may take the ergative and the dative marker.
(114) thay-o:-s tok h-ja:-o lod-o du
boy-PL-ERG call.out-TR-PROG tell-PROG AUX.PRS
'The boys are telling (others), by calling out to (them).'
(115) thay-o:*-s tokh-ja:-foo lo-fo du
boy-PL*-ERG call.out-TR-MDL-PROG tell-MDL-PROG AUX.PRS
'The boys are telling one another, by calling out to one another.'

Alternatively, the original subject can be suppressed (117, 119 compared to 116, 118).
(116) ga pitaŋ pid-o du-k

1SG.NOM door close-PROG AUX.PRS-1SG
'I am closing the door.'
(117) pitay pi-foo du
door close-MDL-PROG AUX.PRS
'The door is closing (on its own).'
(118) mi-s murti ti-o boja:~ja: fe~fe
man-ERG statue water-LOC flow.TR~PFV SEND~PFV
'The man floated ([+control]) the statue in the water.'
(119) ya thay-o: ti-o bo-jar-f-is du-ge
five boy-PL water-LOC flow-TR-MDL-PFV AUX-PST
'Five boys were swept ([-control]) into the water.'

71 In fast speech the form is realized as [ $\dagger \jmath^{\mathrm{h}^{\mathrm{h}} \mathrm{jo}}$ ].
$-\int \iota$ in Kinnauri occurs also in constructions which are not normally associated with the middle voice.

First, there is a kind of generalization of the reflexive usage of $-\int \iota$ in Kinnauri, reminiscent of possessor raising (Deal 2017), where the verb retains the object or other non-subject argument, and $-f \iota$ indicates that its referent belongs to the subject, e.g., through a kinship relation, or by being part of their body (the subject doing something to/with their body part) or through possession/ownership.
(120) do raidzkumar an-u thepij-o tsisay lig-fis

DEM.DIST.NVIS prince ANA-POSS cap-LOC flour put-MDL-PFV
kim-o-tf dua~dva bjo-gjo
house-LOC-ABL come.out $\sim$ PFV go-PST
'That prince, taking flour in (his) cap, came out of the home and went.'
(121) bag-e bal-e pitay lig-f-is
rear.of.dance-MNR head-MNR door put-MDL-PFV
'(The priest's wife said: "the smart prince) is dancing, carrying (our home's main) door on (his) head".'
(122) raidza somsi ray-u den fog-f-is ane-nu
king early.morning horse-POSS on ride-MDL-PFV ANA.PL-POSS
dorbar-o ba-tf-is
court-LOC come-MDL-PFV
'the next day the king rode on (his) horse, and came to (his) court.'

Second, $-\int \iota$ occurs in constructions where it highlights that more than one person is involved in an activity and that the action is done collectively. The corresponding clauses with singular subject occurs with the same verb, but without $-f l$. This happens with both transitive (123-126) and intransitive (127-128) verbs.
(123) nane $t^{h} u$ krab-o du- $\int$
aunt why cry-PROG AUX.PRS-3SG.HON
'aunt, why is (she) crying?'
(124) isan ta krab-foo du
briefly FOC cry-MDL-PROG AUX.PRS
'For some time (those two) are crying.'

```
(125) raidza hal-ed-o du
    king walk-Intr-Prog aux.Prs
    'The king is taking a walk'
(126) kon-ja: ek-e hale-foo du
    friend-PL one-LOC walk-MDL-PROG AUX.PRS
    'Friends are walking (together).'
(127) do-go: fum-is tshetsats-u san-əm
    DEM.DIST.NVIS-PL three-ERG girl-DAT kill-NMLZ
    ruja:-fis du-gjo
    prepare-MDL-PFV AUX-PST
    'Those three (sisters-in-law) prepared to kill the girl.'
(128) fum-ki \({ }^{72}\) lo-f-o du
    three-EMP tell-mDL-PROG AUX.PRS
    'All three are telling (at the same time to one another).'
```

$-\delta \imath$ also occurs in constructions where the agency/volitionality of the subject is emphasized; that the subject acted on his/her own free will. The regular active clause case marking on core arguments is retained. This usage has been reported as the primary function of cognate items in the Macro-Tani languages by Modi and Post (2020) under the label "subject autonomy".

```
(129) somsi sar-o du
    early.morning rise-PROG AUX-PST
    'In the early morning (the prince) is waking up.'
```

(130) jaydze-s ra:tiy sar-f-is do dig-u
o.woman-ERG night rise-MDL-PFV DEM.DIST.NVIS pot-DAT
may-gjo
hide-pst
'In the night the old woman woke up (and) hid the bowl [she woke up
in the middle of the night as she wanted to hide the bowl before every-
one else wakes up in the morning].'

72 The emphatic marker -i is realized as -kil-gi with a few numerals: nif 'two', fum 'three', $p z$ 'four' and $\eta a$ 'five'. In all these cases, the emphatic marker -i, too, is permissible (e.g. fum- $i$ [three-EMP]). Similarly, the ergative marker is realized with an initial $-k$ - after these numerals (e.g., $\eta a k-i s$ [five-ERG]).
(131) tora: say-f-is thats-i mas-ts tseik lutja:~tja: thief.PL enter-MDL-PFV some-EMP NEG.AUX-HAB all loot.TR~PFV '(The priest's wife said:) "thieves entered the house. Nothing is there (= left). (They) looted (us)."'

Finally, the verb forms with the middle marker can also occur in non-final clauses. For example in relative clauses (e.g. gja:-fid [want-mDL-HAB] '(the queen) who is desired)' and in non-final clauses in a complex construction.

```
(132) nif-i thay-o: krab-foo krab-f-o ma-han-am
    two-EMP child-PL cry-MDL-PROG cry-MDL-PROG NEG-can-NMLZ
    nipi sunts-ja:-f-o du-gjo
    after think-TR-MDL-PROG AUX-PST
    'Those two children, sobbing, after not agreeing (to stay behind), were
    (collectively) thinking'
```


### 4.1.3.4 (De)transitivizing Morphology in IA Loanwords

In a subset of IA loanwords, $-e /-e d /-e n$ is suffixed to form an intransitive verb and $-j /-j a:$ in the same slot is suffixed to form the corresponding transitive verb.

| V (INTR) | V (TR) |  |
| :--- | :--- | :--- |
| poltennu | poltja:mu | 'to turn around, to roll' |
| ba:sennu | ba:sja:mu | 'to smell' |
| pa:lennu | pa:lja:mu | 'to grow' |
| bojennu | boja:mu | 'to float, to blow' |
| somdzennu | somdzja:mu | 'to understand' |
| dzonlennu | dzonlja:mu | 'to swing' |

Both suffixes are subject to morphophonologically conditioned variation (see Sections 2.3.2 and 4.5.2.4).
4.1.3-4.1 The Transitive Marker -j/-ja:

All Kinnauri disyllabic verb stems with $-j /-j a:$ in the final syllable are transitive verbs. ${ }^{73}$ The allomorph - $j$ appears before the progressive aspect marker -o (see Section 4.5.2.4), and -jar occurs in all other contexts. $-j /-j a r$ is suffixed to IA loans and to verbs of unknown etymologies, but never to ST verbs. All the following verbs are of IA origin.

```
monja:mu 'to make someone agree'
phulja:mu 'to blow (something)'
arja:mu 'to call (someone)'
somdzja:mu 'to explain (something)'
phikja:mu 'to throw (something)'
polfja:mu 'to flip over (e.g. bread, quilt)'
tshutja:mu 'to release (something)'
tolja:mu 'to weigh (something)'
```

Once the transitivizer $-j /-j a:$ is affixed to the verb stem, it becomes part of the lexical item, which then undergoes the same processes as a regular lexical verb. As we will see in Section 4.5.2.2, the monosyllablic verb stem is reduplicated in the perfective aspect, if the verb stem does not end in $-t f$ or $-\int$. If the verb stem is disyllabic, there is partial reduplication, where only the second syllable is reduplicated. In the perfective form of the verb stems with $-j /-j a^{\prime}$, it is the last consonant of the penultimate syllable together with the final syllable (-ja:) which is reduplicated.

| V (TR, INF) | V (PFV) |  |
| :---: | :---: | :---: |
| $p^{\text {hikja:mu }}$ | $p^{\text {hikja:kja }}$ | 'to throw (something)' |
| tshinja:mu | tshinja:nja: | 'to cut (e.g. vegetables)' |
| polfja:mu | poltja:tja | 'to flip over (e.g. bread)' |
| bodja:mu | bodja:dja: | 'to increase (something countable)' |
| rokja:mu | rokja:kja: | 'to stop (someone)' |
| metja:mu | metja:tja: | 'to gather (something)' |
| kufja:mu | kufja:/ja: | 'to wipe, to sweep (something)' |
| dzonlja:mu | dzonlja:lja: | 'to swing (something)' |

73 These verbs often have an intransitive IA base. In some ways, the transitive verb forms with
(cont.)

V (TR, INF) V(PFV)
dзekhja:mu dзekhja:khja: 'to rub (e.g. clothes)'

4.1.3.4.2 The Intransitive Marker -e/-ed/-en

Disyllabic verb stems with -e/-ed/-en as the final syllable are intransitive verbs in Kinnauri. As was the case with the transitive marker $-j /-j a$ : above, $-e /-e d /-e n$ too occurs only with IA loans or verbs of unknown etymology, never with ST verbs. The suffix appears in three different shapes determined by morphophonological context; see Section 2.3.2.

As some of the previous as well as the following examples show, some verbs permit two de-transitivized verb forms, one with the middle marker and another with the intransitive marker -e/-ed/-en.

| V (TR) | $\mathrm{V}\left(\mathrm{MDL}-\int \downarrow\right)$ | V (INTR -ed) |  |
| :---: | :---: | :---: | :---: |
| poltja:mu | poltja:jimu | poltennu | 'to flip' |
| bassja:mu | ba:sja:jımu | ba:sennu | 'to smell' |
| pa:lja:mu | pa:lja:/imu | pa:lennu | 'to grow' |
| dubja:mи | dubja: $/$ ımu | qubennu | 'to drown' |
| somdzja:mu | somdzja:/imu | somozzennu | 'to explain' |
| sikja:mu | sikja:Imu | sikennu | 'to move' |
| bodja:mu | bodja:/ımu | bodennи | 'to increase' |
| rokja:mu | rokja:imu | rukennu | 'to stop' |
| dzonlja:mu | dzonlja: im u | dzonlennu | 'to swing' |

-j/-ja: in Kinnauri show parallels to a similar transitivizing device in Hindi, where the transitive form has a long -a: in the final syllable. For example, palatna: 'to turn over (INTR)' vs. palta:na: 'to turn over (TR)', latakna: 'to hang (INTR)' vs. lataka:na: 'to hang (TR)', palana: 'to be raised (INTR)' vs. pa:Ina: 'to raise (TR)'. However, in Kinnauri, the $-j /-j a$ : transitivizing strategy also occurs in verbs where Hindi instead changes the stem vowel. For example, in Hindi tutna: 'to break (INTR)' vs. torna: 'to break (TR)', thutana: 'to leave (INTR)' vs. thorna: 'to leave (TR)', rukna: 'to stop/stay (INTR)' vs. rokna: 'to stop (TR)'. Another potential etymological source of $-j /-j$ : could be an element cognate with Tibetan byed 'do'.

In such instances there seems to be some difference in their distribution: -e/-ed/-en occurs with singular subjects, while $-\int \iota\left(\right.$ i.e., $\left.-j a \leq-\int \iota\right)$, has the interpretation that more than one participant is involved and that they acted collectively:

| V (INTR -ed) |  | V (MDL -jai-fi) |  |
| :---: | :---: | :---: | :---: |
| poltennu | 'to turn around, to roll' (sG) | poljja:/imu | 'to turn around, to roll' (PL, collectively) |
| ba:sennu | 'to smell' (sG) | ba:sja: $/ \mathrm{imu}$ | 'to smell' (PL, collectively) |
| pa:lennu | 'to grow' (SG) | pa:lja:fimu | 'to grow' (PL, collectively) |
| bojennи | 'to float, to blow' (SG) | boja:jimu | 'to float, to blow' (PL, collectively) |
| rukennи | 'to stop' (SG) | rokja:fimu | 'to stop' (PL, collectively) |
| somdzennи | 'to understand' (sG) | somdzja:fimu | 'to understand' (PL, collectively) |
| dsonlennи | 'to swing' (SG) | djonlja: $\int i m u$ | 'to swing' (PL, collectively) |

However, as the following examples show, some verbs which take the transitive marker -j/-ja:, do not permit the intransitive marker -e/-ed/-en.

| V (TR -jai) | V (MDL -jas-fi) | V (INTR -ed) |  |
| :---: | :---: | :---: | :---: |
| $t(r) u: t^{h} j a: m u$ | $t(r) u: t^{h} j a: / i m u$ | *t(r)uithennu | 'to squeeze' |
| Sothja:mu | fothja:fimu | *othennu | 'to leave' |
| $p^{\text {hurkjaimu }}$ | $p^{\text {h urkja:jimu }}$ | *phurkennu | 'to blow' |
| arja:mu | arja:fimu | *arennu | 'to call' |
| $p^{\text {hikjaimu }}$ | $p^{\text {hikja: }}$ /imu | *phikennu | 'to throw' |
| tshinja:mu | ts ${ }^{\text {injax }}$ /fimu | *ts hinennu | 'to cut' |
| dzekhja:mu | dsekhja: $/ \mathrm{imu}$ | *dzek ${ }^{h}$ ennu | 'to rub' |
| tolja:mu | tolja:Jimu | *tolennu | 'to weigh' |
| metja:mи | metja:fimu | *теtennu | 'to gather' |
| kuјја:ти | kufja: $/ \mathrm{im}$ u | *kufennu | 'to wipe/sweep' |
| metja:mu | metja: j imu | *metennu | 'to gather' |

In this set of verbs, as the following examples illustrate, the verb form with the middle marker occurs with singular as well as plural subjects. It is unclear why the -ed verb forms are not permitted with this set of verbs.
(133) id kami:dz la:n-is phik-ja:-f-is du
one shirt wind-Ins throw-TR-MDL-PFV AUX.PRS
'One shirt fell down in the wind.'

## $4.2 \quad$ Subject Indexing

Both nominative and ergative subject arguments control subject indexing. The subject indexing markers occur in both copula and non-copula constructions. Table 20 presents the subject indexing markers. -o: functions as the plural indexing marker with 2 NH and 3 H and -sup functions as the dual subject indexing marker with 3 NH . In natural discourse the plural marker does not occur obligatorily with plural subjects. Similarly, with dual subjects, the plural marker -o: occurs more frequently than the dual indexing marker -suŋ.

TABLE 20 Subject indexing markers
Person SG PL/DU

| 1 | $-k$ | $-t f(\mathrm{DU}, \mathrm{PLE}),-m e(\mathrm{PLI})$ |
| :--- | :--- | :--- |
| 2 NH | $-n$ | $-n(-o:)(\mathrm{DU}, \mathrm{PL})$ |
| 2 H | $-n$ | $-t f(\mathrm{DU}, \mathrm{PL})$ |
| 3 NH | $\emptyset$ | $\emptyset(\mathrm{DU}, \mathrm{PL}),-\operatorname{su\eta }(\mathrm{DU})$ |
| 3 H | $-\int$ | $-\int(-o:)(\mathrm{DU}, \mathrm{PL})$ |

## 4.3 "Affected Object"Indexing

The object indexing marker is $-t / /-t f i($ except with the verbs 'to give' and 'to tell' where there is a change in the verb form; see below) is suffixed to the verb. When the following suffix begins with a vowel, the $-t f$ allomorph appears. The object index occurs with speech act participants in both singular and plural.

The characterization "most affected object" captures the distribution of the "ist/2nd object" index better than simply calling it an "object" marker. $-t /-t f i$ occurs when a speech act participant is the most affected-zero or dative marked—participant in a clause (finite or non-final). This could be a patient, a recipient, or a beneficiary, including a speech act participant in the "subject" position in dative subject construction (see below). The speech act participant is [-control] in such constructions.

```
(135) dok me: leg-tf-a-k
    then fire burn-1/20-FUT-1SG
    'I will set you on fire.'
(136) ay-u ama-boba-s birmath \({ }^{h}\) osten rakses-u dor
    1SG-Poss mother-father-erg i.name demon-poss near
    \(\int e-t-i s\)
    send-1/20-PFV
    'My parents sent me with the demon Birma Chostin,'
(137) ga me ki-n doktf ral un-tfli-mu
    1SG.NOM yesterday 2 SG.H-Poss from rice take-1/2O-INF
    to-tf-e-k
    AUX-PST-1SG
    'Yesterday I was (thinking of) taking rice from you.'
```

The "object" index marker - $t / /-t f$, like middle $-\int \ell$, does not assimilate. The exception is a set of verbs where the object index is realized as $-d_{3} /$ /d $d_{3} i$, but never as $-t / /-t f i$. In my material, this applies to the following verb stems: $d z a a^{-}$'eat', gja:- 'want', mja:- 'not.want', $k^{h} o$ - 'skin(v)', and ruy- 'watch'. A few verbs (e.g. $p^{h}{ }_{j o-}$ 'take away', ta:- 'put') seem to permit both $-t / /-t i$ and $-d_{3} /-d_{3} i$ as the object marker.
(138) boba-s ga:ray-u deŋ-stay kor-tf-is kifaŋ-u father-ERG river-POSS there-until bring-1/2O-PFV 1DU-POSS $i d-u \quad n \partial \eta \quad p^{h} j o-t f-i s \quad i d-u \quad d z a \eta$ ta:-dz-is one-DAT there take.away-1/20-PFV one-DAT there put-1/20-PFV dok kifay-u dobi baja:ray-is pal-jas-tf-is then 1DU-DAT washerman couple-ERG raise-TR-1/2O-PFV '"(Our) father took us to the river. He took away one of us. The other one was left there. Then the washerman couple raised us two."'

```
(139) a\eta-u phjo-dzi-mu
    1SG-DAT take.away-1/2O-NMLZ
    'While coming to take me,'
```

The object indexing marker occurs when the speech act participant is the most affected argument in a clause. If the proper conditions are met, both subject indexing and object indexing can occur in the same clause. The object indexing marker occurs before the tense/aspect markers.

| (140) | do-s ay doktf rupja un-tf-e-f |
| :---: | :---: |
|  | 3SG-ERG 1SG.NNOM from money ask-1/20-PST-3H |
|  | 'S/He then asked me for money.' |
| (141) |  |
|  | 1SG-DAT i.name demon-poss near send-1/20-PST |
|  | 'I was sent with the demon Birma Chosten.' |
| (142) | do-s ay-u kamay rju-t-e |
|  | 3SG-ERG 1SG-DAT work(N) make.do-1/2O-PST |
|  | 'S/He made me do the work.' |
| (143) | do raim-u kamay rju-o |
|  | 3SG i.name-DAT work(N) make.do-PST |
|  | 'S/He made Ram do the work.' |
| (144) | тау-о ay-u rakses-is dza:-dz-e |
|  | dream-LOC 1SG-DAT demon-ERG eat-1/20-PST |
|  | 'In the dream the demon ate me.' |
| (145) | ra:m-is ay-u dzali bait-en-nu fe-tfee |
|  | i.name-ERG 1SG-dat lie(n) talk-INTR-INF SEND-1/2O-PST |
|  | 'Ram made me tell a lie.' |

Clauses involving the object indexing marker can have all three persons as their subjects (see examples above and below). The subject indexing marker remains the same (including its placement), as described in Section 4.2.
(146) ana:res-o ra:m-is ay-u tay-tf-e- $\int$
darkness-LOC i.name-ERG 1SG-DAT observe-1/2O-PST-3H
'In the darkness Ram saw me.'
$\begin{aligned} \text { (147) } & d o-s \quad \text { lo-kjo "gja:-dz-a-k } \quad \text { gja:- } d 3-a-k " \\ & \text { 3SG-ERG tell-pST want-1/2O-PST-1SG want-1/2O-PST-1SG } \\ & \text { 'He (= the priest) said: "I want, I want (you as my servant)." }\end{aligned}$

Although - $t l i$ is the default object indexing marker, in the case of the verbs 'give' and 'tell' there is verb stem suppletion instead. The stem variants kemu [to.give.1/20] ${ }^{74}$ and raŋmu [to.tell.1/20] ${ }^{75}$ occur when the clause has a speech
act participant as affected object; the variants rannu 'to give' and lonnu 'to tell' occur with third person objects. The object indexing marker $-t / /-t f i$ does not occur with these verbs. ${ }^{76}$
(148) ardzun-is mohan-u kotab ran-o-f
i.name-ERG i.name-DAt book give-PST-3H
'Arjun gave a book to Mohan.'
(149) ama-s ay-u $k^{h}$ ou ker-o- $\int$
mother-ERG 1SG-DAT food give.1/2O-PST-3H
'Mother gave me food.'
(150) ka-s-i hudu77 lo~lo / *raŋ~raŋ

2SG.NH-ERG-EMP DEM.DIST.NVIS.DAT tell~PFV
'You (yourself) told (this) to him.'

```
(151) ra:m-is ki-nu ra\eta~ra\eta / *lo~lo
    i.name-ERG 2SG.H-DAT.PL tell.1/2O~PFV
    'Ram told (this) to you.'
```

The object index marker is also suffixed to verb stems with the transitive marker -j/-ja:. For example,

```
(152) ra:m a\eta-u id ba:ta\eta somdz-ja:-tf- 78
    i.name 1SG-DAT one talk(N) understand-TR-1/2O-PST
    'Ram explained me one thing.'
```

and with the past tense marker -o. In the last-mentioned cases, it is realized as ker (i.e., $k e r-o ~ d u$ and ker-o, respectively). The verb form $k e r$ is not permitted elsewhere, e.g. ke~ke [give.1/2O~PFV], but not *kerker; ke-ts [give.1/2O-PST-3H], but not *ker-ts; ma-ke-f, but not *ma-ker-f '(Please) don't give'. The $k e \sim$ ker variation does not seem to represent any dialectal variation. Both verb forms occur in a stable fashion in the speech of my language consultants from Brua.
75 rəŋти (Sangla) : riŋmu (Brua).
76 Kanashi also exhibits this suppletive verb form to indicate $\mathbf{1 / 2 0}$, and Bunan (Widmer 2014) seems to show a similar suppletive verb pattern. riy-men 'say (to SAP)', lot-tc-um 'to say (to non-SAP)'.
77 There are some instances of vowel harmony. E.g., hodo [DEM.DIST.NVIS] but hudu [DEM. dist.NVIS.poss].
$78-e$ occurs as the past tense marker with the object indexing marker.

```
(153) do-s ay-u tol-ja:-tfoo to-\int
    3SG-ERG 1SG-DAT weigh-TR-1/2O-PROG AUX-3H
    'He is weighing me.'
(154) ki a\eta-u somdz-ja:-fl-n-a
    2SG.H 1SG-DAT understand-TR-1/2O-2H-Q
    'Will you explain (X) to me?'
```

The object index marker (or the corresponding suppletive verb stem) also occurs in non-final clauses, nominalized clauses (e.g. ke-ma '(if it is) given to me ...' from kemu 'to give-1/20') as well as in finite verbs.

The dative-marked argument in the dative experiencer construction does not control subject indexing (see Section 5.1). If the dative-marked argument is a speech act participant, it triggers object indexing instead, suggesting that it has not yet acquired the full subject status.

```
(155) ki-nu akha ker-o du-ge
    2SG.H-DAT.PL pain give.1/2O-PROG AUX-PST
    'You were having pain.'
```

As described in Section 4.2, Kinnauri has $-t f$ also as the subject index marker with 1DU, 1PLE, 2DU and 2PL subjects. The subject index marker $-t \int$ and the object index marker $-t / /-t f i$ occur in two different slots; further, the subject index marker is never realized as $-d / /-d z i$, which, as shown above, is the case with the $1 / 20$ marker. This is the case in both declarative and imperative clauses.
(156) ki-s ay doktf rupja un-tf-e-tf

2SG.H.ERG 1SG.NNOM from money take-1/2O-PST-2DU/PL.H
'You asked me for money.'
(157) kifay-s ki-n doktf rupja un-tf-e-tf

1DU-ERG 2SG.H-POSS from money take-1/2O-PST-2DU/PL.H 'We (dual) asked you for money.'
(158) kino-s ay doktf rupja un-tfe-tf

2PL.H-ERG 1SG.NNOM from money take-1/2O-PST-2DU/PL.H 'You (HON, PL) asked me for money.'

```
(159) hod-e rə\eta a\eta-u bait-jai-dzi-ri-tf
    DEM.DIST.NVIS-LOC time 1SG-DAT talk-TR-1/2O-IMP-2DU/PL.H
    '(When you will get tired,) that time you call me.'
```

Similarly, the following examples illustrate the difference between the $1 / 2$ affected participant marker $-t / /-t f i$ and the middle marker allomorph $-t / i$.

```
(16o) somsi sar-o du
    morning raise-PROG AUX.PRS
    'In the morning (the prince) is raising (the priest from his sleep).'
```

(161) nasom niŋo-nu le sar-tli-ra
tomorrow 1PLE-DAT.PL EMP raise-1/2O-IMP
'Tomorrow you should wake me up!'
(162) tshetsats-o: sar-f-e
girl-PL raise-MDL-PST
'The girls woke up (on their own).'

This category is slightly reminiscent of egophoricity in Tibetic (e.g., in Navakat; see Chapter 3), in that it concerns SAP verb arguments. The similarity ends there, however, since the referent of the object index marker remains the same in declaratives and in interrogatives. The "Object" index (including verb suppletion of 'give' and 'tell') in Kinnauri occurs everytime we have a speech act participant as the most affected participant (including in the dative subject construction, see below).

And lastly, the deictic center in Kinnauri is broader than in some other ST languages such as Lhasa Tibetan and Ladakhi in that in Kinnauri it includes second person. In Lhasa Tibetan and Ladakhi a distinction is made between first vs. non-first person, while in Kinnauri it is third person vs. non-third person.

### 4.4 Copula Constructions

$t o, d u$ and $n i$ function both as equational and existential copulas (glossed here as [COP])..$^{79}$ The copulas to and $d u$ occur in non-future tenses, where clauses
$79 n i$ can also function as a lexical verb. It then takes tense, aspect and subject indexing markers, e.g., ra:m kim-o ma-ni-ts to ho [i.name house-LOC NEG-stay-HAB AUX.PRS DSM.probably] 'Ram probably does not stay at home.' Joshi (1909) provides dush [be.3PL] (of the verb nimig 'to be').
involving the copula to may occur with all three persons as their subjects; the copula $d u$ occurs here only with third person subjects. The copula $n i$, on the other hand, occurs in all tenses. In the future tense it occurs with all persons, where it takes the tense and subject indexing markers, but in the past and present tenses it occurs only with third person subjects, where it does not take any inflectional ending.

```
(163) ga maftor to-k/*du-k
    1SG.NOM teacher COP.PRS-1SG
    'I am a teacher.'
(164) ka maftor to-n/**du-n
    2SG.NH teacher COP.PRS-2SG.NH
    'You are a teacher.'
(165) kotab dam to /du/ni
    book good cop.PRS
    'The book is good.'
(166) id radza du-gjo
    one king cop-pst
    'There was a king.'
```

The distribution of $t o, d u$ and $n i$ with third person honorific and non-honorific subjects is semantically conditioned. The semantic interpretations of to and $d u$ with honorific subjects are different from their interpretations with nonhonorific subjects.

We will first consider the semantic interpretations associated with the copulas in clauses involving non-honorific subjects.
to in such constructions indicates that the subject is somehow related to the speaker. This may either be because they are members of the same family or because they are in physical proximity to each other.
$d u$ occurs in contexts where the subject does not belong to the speaker and the speaker has no information or knowledge about the subject.
$n i$ occurs where the hearer has some doubts either about the very existence of the subject, or in identifying the subject as either A or B, while the speaker definitely knows the answer (either because they saw it themselves or because they have some way of knowing the truth).
to is used in example (165), when the book either belongs to the speaker or is in their possession; $d u$ is used when the book neither belongs to the speaker
nor is in their possession; $n i$ is used if the hearer has some doubts concerning the book being good, while the speaker knows that it is good.

The distribution and the semantic interpretations of the copulas (to, $d u$ and $n i$ ), as described here, remain the same in the past tense.

The choice of the copulas to and $d u$ with honorific subjects in the copula constructions is, on the other hand, determined by the animacy of the subject. In non-experiencer subject copula constructions, to- $\int$ occurs with animate subjects and $d u-\int$ occurs with inanimate subjects. The semantic interpretation of $n i$ with honorific subjects remains the same as with non-honorific subjects (see above).
(167) sude fare to- $\int /{ }^{*} d u-\int$
i.name(F) beautiful.f COP-3H
'Sudesh is beautiful.'
(168) sude fare to-ke-f/ *du-ge-f
i.name(F) beautiful.F COP-PST-3H
'Sudesh was beautiful.'
(169) do-go:-nu gas-o: dam du-ge(- $\int$ )/ *to-ke(- $\int$ )

3-PL-PL.POSS garment-PL good COP-PST(-3H)
'Their clothes were good.' (With inanimate subjects $d u$ is permitted.)
(170) ki-n gas-o: dam du-ge(- $\left.\int\right) /{ }^{*} t o-k e(-J)$

2 H -POSS garment-PL good COP-PST $(-3 \mathrm{H})$
'Your clothes were good.' (With inanimate subjects $d u$ is permitted.)

Tables 21-23 present the Kinnauri copula paradigms in the past, present and future tenses in the declaratives. Here we can see the distribution of the copulas as well as the distribution of the subject indexing markers. As we can see in these paradigms, while the copula $d u$ takes the past tense marker -ge and -gjo (du-ge, du-gjo), the other copula to takes the past tense markers -ke and -kjo (to$k e, t o-k j o)$. As we saw in Section 2.3.2 above, the past tense marker -kjo occurs with a sub-set of verbs where the verb-stem historically had a final - $d$. Since the copula to also takes the past tense marker -kjo, it is possible that the copula to historically had a stem-final -d.
table 21 Kinnauri copula paradigm (declaratives): Past tense

| Person | SG | PL |
| :---: | :---: | :---: |
| 1 | to-ke-k | to-ke-tf ( $\mathrm{DU}, \mathrm{PLE}$ ), to-ke-me (PLI) |
| 2 NH | to-ke-n | to-ke-n(-os) ( $\mathrm{DU}, \mathrm{PL}$ ) |
| 2H | to-ke-n | to-ke-tf ( $\mathrm{DU}, \mathrm{PL}$ ) |
| 3 NH | to-ke, du-ge, to-kjo, du-gjo | to-ke, du-ge, to-kjo, du-gjo (DU, PL) |
| 3 H | to-ke-f, du-ge-f | to-ke- $\int(-o s)$, du-ge- $\int(-o:)(\mathrm{DU}, \mathrm{PL})$ |
| 3DU.H |  | to-ke-suך, du-ge-suך (DU), ni |

table 22 Kinnauri copula paradigm (declaratives): Present tense

| Person | SG | PL |
| :---: | :---: | :---: |
| 1 | to-k | to-tf (DU, PLE), tonne ${ }^{80}$ (PLI) |
| 2NH | to-n | to-n(-O: $)(\mathrm{DU}, \mathrm{PL})$ |
| 2H | to-n | to-tf (DU, PL) |
| 3NH | to, du, ni | to, $d u, n i(\mathrm{DU}, \mathrm{PL})$ |
| 3H | $d u-\int, t o-\int, n i$ | to- $\int(-o x), d u-\int(-o s), n i(\mathrm{DU}, \mathrm{PL})$ |
| 3DU.H |  | to-suך, du-suך, ni (DU, PL) |

TABLE 23 Kinnauri copula paradigm (declaratives):
Future tense

## Person SG PL

| 1 | $n i-t a-k$ | $n i-t i-t f(\mathrm{DU}, \mathrm{PLE}), n i-t e(\mathrm{DU}, \mathrm{PLI})$ |
| :--- | :--- | :--- |
| 2 NH | $n i-t a-n$ | $n i-t a^{81}-n(o s)(\mathrm{DU}, \mathrm{PL})$ |
| 2 H | $n i-t i-n$ | $n i-t i-t f(\mathrm{DU}, \mathrm{PL})$ |
| 3 NH | $n i-t o$ | $n i-t o(-g o:)(\mathrm{DU}, \mathrm{PL})$ |
| 3 H | $n i-t i-\int$ | $n i-t i-\int(-o:)(\mathrm{DU}, \mathrm{PL})$ |
| $3 \mathrm{DU} . \mathrm{H}$ |  | $n i-t i-s u \eta(\mathrm{DU}), n i(\mathrm{DU}, \mathrm{PL})$ |

8o to-me is not acceptable here.
81 This suffix is also frequently realized as $-t$.

Although the occurrence of the copula is not obligatory in declaratives, it occurs rather frequently.
(171) tshetsats-u naimay lateserzay
girl-poss name i.name
'The girl's name (was) Latiserzang.'
(172) toro ta ama dam to- $\int$
today FOC mother good COP-3H
'Today mother is (feeling) good.'

While the copula $d u$ is not acceptable in declaratives with honorific human subjects, it is permitted in the corresponding interrogative sentences with (honorific) subjects:
(173) boa kim-o to- $\int /{ }^{*} d u-\int$
father house-LOC COP-3H
'Father is at home' (Both when the speaker has seen him at home and when the speaker draws inference.)
(174) boa kim-o du-a/to-a/to-f-a/du-f-a
father house-LOC COP-Q COP-3H-Q
'Is father at home?'
(175) ba:dur kim-o du-a/to-a
(Nepali.)farm.hand house-LOC COP-Q
'Is the Nepali worker at home?'
(176) ki-n baja-ts kim-o du-a /?to-a / to-f-a/du-f-a

2SG.H-POSs brother-DIM house-LOC COP-Q COP-3H-Q
'Is your brother at home?'

In possessive constructions while the copula to is preferred with human subjects, the copula $d u$ is also acceptable among equals. This happens also with third person honorific subjects.


```
(178) ki-n ama-boa dam to-ke-\int/du-ge-\int/ du-ge
    2SG.H-POSS mother-father good COP-PST-3H COP-PST
    'Your parents were good.'
(179) ki-n tfah\eta-o: dam du-ge / to-ke82
    2SG.H-POSS child-PL good COP-PST
    'Your children are good.'
(18o) do-go:-nu tfahy-o: dam to-ke-\int/du-ge-J/ to-ke/du-ge
    3-PL-PL.POSS child-PL good COP-PST-3H COP-PST
    'Their children are good.'
(181) ki-n kui rudza du/to / *du- // *to-\int
    2SG.H-POSS dog old COP.PRS COP.PRS-3H
    'Your dog is old.'
```

Whether the object is honorific or nonhonorific (e.g. difference between a religious book and a fiction book) is not a significant factor in the choice of the copula. As we can see below the copula choice remains the same with both a religious and a non-religious book.
(182) ay kata:b dam to /du/ *to- */du-ऽ 1SG.NNOM book good COP.PRS COP.PRS-3H 'My book (fiction) is good.'

```
(183) a\eta pothi dam du/to/ *to-\int*/du-\int
    1SG.NNOM religious.book good COP.PRS COP.PRS-3H
    'My religious book is good.'
```

Similarly, the copula choice is not sensitive to if the information which the listener receives is new to the listener or not.
(184) ay day (hodo) kitab to / *du
1SG.NNOM COM (DEM.DIST.NVIS) book COP.PRS
'I have that book.' (This occurs regardless of whether the listener knows
which book is being referred to.)
$82 d u-g e$ is preferred.
(185) ay day id kinori fol to /*du/*to-f/*du-f

1SG.NNOM COM one kinnauri shawl COP.PRS COP.PRS-3H
'I have a kinnauri shawl.' (This occurs regardless of whether the listener knows which shawl is being referred to.)

### 4.5 Non-Copula Constructions

4.5.1 Non-Copula Constructions without Auxiliaries

The indexing markers are already described above. Here we will describe the tense distinction. In this finite verb structure a future and past tense distinction is made. This non-copula construction does not occur in the present tense. ${ }^{83}$
4.5.1.1 Future Tense

The future tense markers ( $-a /-t a,-i /-t i,-o /-t o$ ) and their distribution here are the same as in the copula constructions (see Tables 23 and 26 above). The future tense marker - $a /$-ta occurs with 1SG, 2SG.NH and 2PL.NH subjects. - $a$ occurs with verb stems ending in $t \int$ or $\int$ and -ta elsewhere.
pan-ts-i potf-a-k grinding.stone-DIM-EMP search-FUT-1SG '(I) will search for a grinding.stone.'
(187) ga ta tseik-u lo-ta-k

1SG.NOM FOC all-DAT tell-FUT-1SG
'I will tell everyone.'
(188) ka $t^{h} \partial$ gjai-ta-n

2SG.NH what want-FUT-2SG.NH
'What do you want?'

As is the case in the copula construction, the future tense marker $-i /-t i$ occurs, here, too, with 1PL.EXCL, 2SG.H, 3SG.H and 3PL.H. -i occurs with verb stems ending in $-t \int$ or $\int$, and $-t i$ elsewhere.
(189) nijo ham bjo-ti-tf

1PLE where go-FUT-2DU/PL.H
'Where will we go?'

83 A similar situation is found in some IA languages such as Hindi.

```
(190) dzo ki tha ba:ta\eta fe-ti-n
    DEM.PROX 2SG.H what talk (N) SEND-FUT-2H
    'What are you saying to her!? (to express astonishment)'
(191) dogo:84 ra:dzgadi-u den ma-tof-i-\int
    3PL throne-POSS on NEG-sit-FUT-3H
    'He will not sit on the throne.'
(192) jumed thas-ti-\int
    mother.in.law hear-FUT-3H
    '(Your) mother-in-law will hear (the noise).'
```

The future tense marker -o/-to occurs with 3SG.NH and 3PL.NH subjects. -o occurs with verb stems ending in $-t f$ or $-\int$ and -to elsewhere.
(193) ya thoy-o: ray fadi hatfo
five husband-pl com wedding become-FUT
'(Dropadi) will marry with five husbands.'
(194) dzo-s $k^{h} o u$ ke-to

3SG-ERG food give.1/2O-FUT
'S/He will give (you) food.'
(195) baniy dzag-to
pot break-FUT
'The pot will break.'
(196) baniy-o: dzag-to
pot-PL break-FUT
'The pots will break.'

In addition, a future marker $-e /-t e$ occurs in narrative text with $1 D U$ subjects. $-e$ occurs after the middle voice marker $-\int,{ }^{85}$ while -te occurs with transitive verb forms. It has a cohortative ('let's') interpretation. ${ }^{86}$

84 The plural pronominal form is being used here to refer to a singular person (Bharat ' a mythical character in Ramayana') as a marker of respect.
85 The middle voice is realized here as $-\int$, and never as $-j \iota$.
$86-e$ in this position can also have the past tense interpretation. E.g. sa-f-e can mean both [wake.up-MDL-CHRT] 'Let's wake up!' and [wake.up-MDL-PST] '(s/he) woke up (on her/his own)'.
(197) dsanekay bjo-mu tu-ja:-f-e
wedding go-INF get.ready-TR-MDL-CHRT
'Let's get ready for the wedding.'
(198) dyanekay bjo-mu thay-u tu-ja:-te
wedding go-INF child-DAT get.ready-TR-CHRT
'Let's get the child ready for the wedding.'
(199) Sel-f-e
smear-MDL-CHRT
'Let's smear oil! ${ }^{87}$
(200) tete-pay telay fel-te
grandfather-DAT oil smear-CHRT
'Let's smear some oil on grandfather!'
4.5.1.2 Past Tense

The past tense markers which occur in this finite verb structure are: -ge/-gi/ $-k e /-k i,-g j o /-k j o,-a /-j a,-g j a,-e,-o$ and $\emptyset$. They are grouped here in three sets: Set 1:-ge/-gi/-ke/-ki, -gjo/-kjo, and Set 2: -o, -a/-ja, -e, Ø and Set $3:-g j a$.

Set 1 occurs in both copula and non-copula constructions, where -gjo/-kjo occurs with third person (SG, PL) non-honorific subjects. ${ }^{88}$

The $k$-initial allomorphs in Set 1 appear after voiceless consonants and also in some other contexts, notably in verbs whose infinitives end in -nnu. For example, ba-kjo, ba-ki-f (bad-o 'come-prog', bənnu 'to come'), sa-kjo (sad-o [killPROG], sannu 'to kill').

87 This could mean that they smear oil onto one another. It can also occur in a context where the smearing of oil is presented as a group activity.
$88-g j o$ occurs in Kanashi, too. In the following IA languages we have found -gjo as a (remote) past tense/participle: In Hadoti, an IA language spoken in Rajasthan (Dwivedi 2012), -gjo functions as the remote past participle. -gjo in Hadoti inflects for gender and number (-gjo (м), -gi (F)). E.g. khagjo [ate.M.SG], khagja [ate.M.PL], khagji [ate.F.SG], khagje [ate.F.PL]. In Hadoti the past participle (i.e., non-remote past) markers are -to (M)/-ti (F). Marwari, too, has -gjo in past tense (e.g. margjo '(he) died', dzalgjo 'got burnt'). It is very likely that the past tense interpretation in such languages is a grammaticalized function of the past form of the verb 'go' in Hindi: gajaa 'went'. Unlike Hindi, in these languages the forms end in -o/-o. In terms of its form and function, -gjo shows similarities with -gjo in Kinnauri. But in Kinnauri and Kanashi it does not inflect for gender. Another possible IA alternative could be the IA/Hindi kijaa 'did' as the source of this past tense marker -kjo/-gjo. If this hypothesis holds, the influence is from IA to Kinnauri/Kanashi.

Further, the past tense marker in non-copula constructions is always followed by the honorific marker $-\int$. The forms without the honorific marker are unacceptable (e.g. *lo-ke [say-PST] but lo-ki-f is acceptable, *kar-ge [bring.1/20pst], but kar-gi-f is acceptable, *tay-ge [observe-pst] but tay-gi-f is acceptable).
$-g i($ not $-g e)$ is always used before the 3H indexing marker and $-k i$ (not $-k e$ ) in some lexically conditioned cases, notably in verbs whose infinitives end in -nnu (e.g. tofi-gi-ת [sit-PST-3H]; stuk-ki- $[$ [push-PST-3H], stugmu 'to push'; dzok-ki-Л [buy-РSt-3н], dzogmu 'to buy').

When the verb stem ends with a nasal, the consonant of the past tense marker $(-g /-k)$ is not always articulated explicitly in fast speech (e.g. pa:y-i- $\int$ [build-PST-3H]).

The Set 2 and Set 3 past tense markers occur only in the non-copula construction. The Set 2 past tense markers $-a /-j a,-0, \emptyset$ occur with all persons and numbers. Their distribution is complementary. Some verbs (e.g. timu 'to wash') only take the past tense marker - $o$ whereas other verbs (e.g. bjomu 'to go', dza:mu 'to eat', tofimu 'to sit') only permit $\emptyset$ as their past tense marker (e.g. bjo-k [go1SG]).

Table 24 illustrates Set 1 and Set 2 past tense markers (see in the text below for a description of Set 3). The Set 1 finite verb forms are illustrated here with 3SG.NH and 3SG.H (in this order, see column 2). It shows that all verbs permit both past tense makers of this set. The Set 2 finite verb forms are illustrated here with the 1SG, 3 SG.NH and 3 SG.H subject indexing markers (in this order). As we see here a verb permits either the past tense marker Ø (column 3), -o (column 4) or -a/-ja (column 5).

TABLE 24 Set 1 and Set 2 past tense markers

| Infinitive form | Set 1: | Set 2: $\emptyset$ | Set 2:-o | Set 2: $-a /-j a$ |
| :--- | :--- | :--- | :--- | :--- |
|  | $-g j o /-k j o(3 S G . N H)$, | (1SG, 3SG.NH, |  |  |
|  | $-g e /-g i /-k e /-k i(3 S G . H)$ | 3SG.H $)$ |  |  |

bjomu 'to go' vannu 'to laugh' dza:mu 'to eat' tfimu 'to wash' tеети 'to write' tаŋти 'to observe' karmu 'to bring'

| bjo-gjo, bjo-gi- $\int$ |
| :---: |
| va-kjo, va-ki-f dza:-gjo, dza:-ge |
| til-gjo, til-ge-f |
| te-gjo, tfe-ge-f |
| tay-gjo, tay-ge- $\int$ |
| kar-gjo, kar | kar-gjo, kar-ge- $\int$

bjo-k, bjo, bjo-f
va-k, va, va- $\int$ $d z a:-k, d z a:, d z a:-\int$
$t \int l-o-k, t f l-o, t l-o-\int$
tfe-o-k, tfe-o, te-o- $\int$
tay-o-k, tay-o, tay-o- $\int$
kar-a-k, kar-a, kar-a- $\int$

When the finite verb has the object indexing marker $-t$, $-e$ occurs as the Set 2 past tense marker.
(201) thay-is ts hetsats-u kul-o
boy-ERG girl-DAT beat-PST
'The boy beat the girl.'
(202) thay-is ay-u kul-tf-e
boy-ERG 1SG-DAT beat-1/2O-PST
'The boy hit me.'
(203) ra:m-is tshetsats-u ar-ja:-f
i.name-ERG girl-DAT call-TR-3H
'Ram called the girl.'
(204) ra:m-is ay-u ar-ja:-tf-e-f
i.name-ERG 1SG-DAT call-TR-1/2O-PST-3H
'Ram called me.'

Similarly, when the verb stem has the middle voice marker - $\int i$ (see Section 4.1.3.3), $-e$ functions as the past tense marker.
(205) sjano-go: $\quad t^{h} u k-f-e-\int$
o.person-PL meet-MDL-PST-H
'(Those) old people met (each other).'

As we saw earlier, both Set 1 and Set 2 past tense markers are permitted with third person subjects. Their distribution is evidentially determined. With nonhonorific subjects the Set 1 past tense markers (-ge/-gi/-ke/-ki and -gjo/-kjo) occur when the speaker has not seen with their own eyes that which is being described. The Set 2 past tense markers ( $-0,-a /-j a,-e, ~ Ø$ ) occur, on the other hand, when the speaker saw with their own eyes that which is being described.

This distinction holds also with third person honorific subjects. The Set 2 marker occurs when the speaker has direct knowledge-having seen it themselves; but if the speaker does not have direct knowledge, the Set 1 past tense marker -ge occurs instead (compare 206 and 207).

[^25]```
(207) lama:dji kim-o bjo-gi-f
    lama.H house-LOC go-PST-H
    'The honorable lama went home. (Indirect knowledge)'
```

The Set 3 past tense marker -gja occurs with subjects in all persons (e.g. dzai-gja$n$ [eat-PST-2SG.NH], bjo-gja-n [go-PST-2SG.NH], va-gja- $\int[$ laugh-PST-3H], ti-gja$k$ [wash-PST-1SG], tfe-gja-k [write-PST-1SG], taŋ-gja-k [observe-PST-1SG], kər-gja-k [bring-PST-1SG], kul-gja [beat-PST], $t t^{h} u k-\int \iota-g j a-\int$ [meet-mDL-PST-3H], ar$j a:-f_{l}-g j a$ [call-TR-1/2O-PST] for example). It is also realized as $-g j i$ with the 3 H subject indexing marker. It expresses that something was contrary to expectations. For instance, if the speaker first believes that s/he has not brought $X$, or an interlocutor expresses doubts about this, and it then turns out that the speaker in fact has brought $\mathrm{X}, \mathrm{s} /$ he can use -gja to convey this: kər-gja-k [bring-PST-1SG] 'I did bring (it)'.

### 4.5.2 Auxiliary Construction

### 4.5.2.1 Auxiliaries

In this finite structure to and $d u$ (originating in copulas) function as auxiliaries (glossed here as [AUX]). The auxiliary carries the tense and the subject indexing markers, while the aspect marker and object indexing marker is affixed to the main verb. Kinnauri makes a three-way aspectual distinction: perfective, habitual and progressive.

The auxiliaries to and $d u$ occur with all persons, numbers and aspects in the finite verb structure V(-O.IDx)-ASP (AUX(-TNS)-IDX). Their occurrence is, however, not obligatory. Unlike copula constructions, in non-copula constructions $d u$ (along with to) occurs as an auxiliary also with first and second person subjects (210-214), apparently without any change in meaning (including if the duration of an event is or is not in focus).
(208) go kamay lan-o du-k

1SG.NOM work(N) make-PROG AUX.PRS-1SG
'I am working.'
(209) sonam-is id thar sa~sa du-ge
i.name-ERG one leopard kill~PFV AUX-PST
'Sonam killed a leopard.'
(210) ga jal~jal jag-o du-k/to-k

1SG.NOM tire~PFV sleep-PROG AUX-1SG
'Having gotten tired, I am sleeping'
(211) nipo badzair-o bjo-u $\quad$ du- $t f /$ to- $t f$
1PLE market-LOC go-PROG AUX-1DU/PL.EXCL
'We are going to the market.'
(212) ki badzarr-o bjo-u du-n/to-n

2SG.H market-LOC go-PROG AUX-2SG.H
'You are going to the market.'
(213) ga jal~jal jag-o du-ge-k/to-ke-k

1SG.NOM tire~PFV sleep-PROG AUX-PST-1SG
'Having gotten tired, I was sleeping.'
(214) ka kanoriy tof-o du-ge-n/to-ke-n

2SG.NH p.name sit-PROG AUX-PST-2SG.NH
'You were living in Kinnaur.'
(215) hodo kui matiy-u den din~din du/to DEM.DIST.NVIS dog floor-poss on lie~PFV aUX.PRS 'That dog has lain down on the floor.'

However, in the following two instances some traces of evidentiality associated with the copulas to and $d u$ can be inferred from remarks made by a language consultant. In (216), according to the language consultant to-ke occurs in this example when the speaker has the direct knowledge that Tanzin used to live in Kinnaur. This could, for example, be because the speaker, too, used to live in Kinnaur then. In example (217) $d u$ is preferred when the subject is not known to the speaker. But in the previously given examples the same language consultant refused to entertain any such interpretation in the choice of the auxiliaries.
(216) tandzin kanoriy tofo du-ge / to-ke i.name p.name sit-prog AUX-PST 'Tanzin was living in Kinnaur.'
(217) sonam jal~jal jag-o du-f/to-f
i.name tire~PFV sleep-PROG AUX.PRS-3H
'Having gotten tired, Sonam is sleeping.'

The object indexing marker has already been described. Its distribution in this construction remains the same as described above. In the following sections we will describe the distribution of the various aspect markers.

### 4.5.2.2 Perfective Aspect

The perfective aspect is marked by -is or reduplication of the final syllable of the verb (e.g. taŋ~taŋ [observe~PFV], cf. taŋmu 'to observe'). Their distribution is phonologically conditioned. -is occurs when the verb ends in $-t f$ or $-\int$. Reduplication occurs in all other cases.
(218) sonam-is me id kotabhuf-is du
i.name-ERG yesterday one book read-PFV AUX.PRS
'Sonam has read a book yesterday.'
(219) sonam-is ra:m $\int \iota-m u$ baitay $t^{h} a s \sim t^{h} a s d u$
i.name-ERG i.name die-INF talk(N) hear~PFV AUX.PRS
'Sonam has heard the news of Ram's death.'

Most Kinnauri verbs are monosyllabic. Thus, the perfective is the reduplicated form of the whole verb stem. However, when the verb stem is longer, the perfective is formed by reduplicating the final syllable of the verb stem (compare 219 and 22O) (see Section 4.1.3-4.1 for a possible exception).

Two verbs, lannu 'to do, make' and rannu 'give', permit two variants each in PFV: lan lan $\sim l a \sim l a ; r a n \sim r a n \sim r a \sim r a$. According to language consultants there is no difference in meaning and this is not a dialectal difference either.

```
(220) ga dilli bjo-mu suntse~tse to-k
    1SG.NOM p.name go-INF think~PFV AUX-1SG
    'I have thought of going to Delhi.'
```

The perfective aspect occurs in finite clauses with all tenses and numbers. It also occurs in four non-final constructions. First, it occurs in non-final clauses in the clause chain construction (see example 221). Second, it occurs as the main verb in a complex verb construction (e.g., 222).

> (221) do kotab huf-is $k^{h}$ ou dza:~dza: jag-o
> 3SG book read-PFV food eat~PFV sleep-PsT
> 'S/He read a book, ate food and (then) slept.'
(222) hudu dak-tf baniך dzag~dzag bjo
DEM.DIST.NVIS.POSS near-ABL pot break(INTR)~PFV GO.PST
'The pot got broken through him.'

Third, it also occurs as a non-final clause where it has a temporal adverbial interpretation:

```
(223) ga-s mi-pa\eta githa\eta lan~lan nipi ta\eta-o-k
    1SG-ERG man-DAT song make~PFV SUBO observe-PST-1SG
    'I looked at the man after the man sang a song.'
    'I looked at the man after I sang a song.'
```

Fourth, it also functions as the past participle verb form (compare 224 and 225).

```
(224) ra:m ba~ba
    i.name come~PFV
    'Ram came.'
(225) dilli-tf ba~ba mi
    p.name-ABL come~PFV man
    'The man who came from Delhi'
```


### 4.5.2.3 Habitual Aspect

Habitual aspect in Kinnauri is marked by -id/-ts. -id occurs after -tf or $-\int$ (verbstem final or the object indexing marker); -ts occurs elsewhere.
(226) ga dja:ro thay-o:-nu tay-ts du-k

1SG.NOM every.day boy-PL-DAT.PL observe-HAB AUX-1SG
'I look at the boys every day.'
(227) nijo hojo kim-o tof-id

1PLE DEM.PROX house-LOC sit-HAB
'We live in this house.'

The habitual marker describes non-referential situations (229, 231), while the progressive aspect marker describes specific, referential situation (228, 230).
(228) sonam jal~jal jag-o
i.name tire~PFV sleep-PROG
'Having gotten tired, Sonam is sleeping (right now).'
(229) sonam jal~jal jag-ts
i.name tire~PFV sleep-нав
'Having gotten tired, Sonam sleeps (= has the habit of falling asleep).'

```
(230) tshets \({ }^{h}\) ats gas-o: tilo to- \(\int\)
    girl garment-PL wash-PROG AUX-3H
    'The girl is washing clothes (just now).'
(231) tshetshats gas-o: tilts to- \(\int\)
    girl garment-PL wash-HAB AUX-3H
    'The girl washes clothes (e.g. every day).'
```

As was the case with the perfective aspect marker, the habitual aspect marker, too, has certain additional functions. It functions as the present participle marker ${ }^{89}$ (e.g. 232-233) and as the agentive nominalizer (e.g. 234-235).
(232) ga-s githay lan-ts mi-paך taŋ-o-k 1SG-ERG song make-HAB man-DAT observe-PST-1SG 'I looked at the man while he (= the man) was singing.' 'I looked at the man while I was singing.'
(233) ga-s sita utf-id tay-o-k

1SG-ERG i.name sulk-HAB observe-PST-1SG
'I saw Sita sulking.'
(234) jag-ts[jakts] thay-o:
sleep-нав child-pl
'Children who are sleeping'
(235) matiy-u den tof-id thay
floor-poss on sit-hab child
'The child who is sitting on the floor'

### 4.5.2.4 Progressive Aspect

The progressive aspect marker is $-o$. The verb stem with the progressive aspect can optionally be followed by an auxiliary (to(-IDx) or $d u(-I D x))$. Examples are illustrated here with the auxiliary $d u$.
$89 \int-\int-t-o:$ [die-нAB-PL] occurs as a frozen expression to refer to those who have died, but whose souls have not rested completely (their presence is felt by their living relatives in the form of illness/difficult times).

| V (INF) | V-PROG AUX.PRS |  |
| :---: | :---: | :---: |
| $t^{\text {homu }}$ | $t^{h} o-o d u$ | [tan-PROG AUX.PRS] |
| sити | su-o du | [bathe(Tr)-PROG AUX.PRS] |
| gvafimu | gvajl-o du | [jump-mDL-PROG AUX.PRS] |
| grumи | gru-o du | [burn(INTR)-PROG AUX.PRS] |
| hunnu | hun-o du | [teach-Prog aux.Prs] |
| $k^{\text {herja:mu }}$ | $k^{h} e r-j$-o du | [chase-TR-PROG AUX.PRS] |
| піти | ni-o du [nijo du] | [stay-PROG AUX.PRS] |
| tuja:mu | $t u-j$-o du | [make-TR-PROG AUX.PRS] |
| pidzja:mu | pidz-j-o du | [pray-TR-PROG AUX.PRS] |
| tolja:mu | tol-j-o du | [weigh-Tr-PROG AUX.PRS] |
| Soja:mu | $\int o-j$-o du | [sweep-Tr-Prog Aux.Prs] |
| timu | $t l$-o du | [wash-PROG AUX.PRS] |
| tremu | tre-o du | [knead-prog aux.prs] |
| arja:mu | ar-j-o du | [invite-TR-PROG AUX.PRS] |
| najpja:mu | nap-j-o du | [measure-TR-PROG AUX.PRS] |
| rokhja:mu | rokh-j-o du | [prevent-tr-Prog aux.Prs] |
| tеети | te-o du | [write-PROG AUX.PRS] |
| $k^{h}$ imu, $k^{h j a m u}$ | $k^{h} i$-o du | [see-PROG AUX.PRS] |
| imu | $i$-o du | [ask-PROG AUX.PRS] |
| butrja:mu | butr-j-o du | [rub-Tr-PROG AUX.PRS] |
| kulugmu | kulug-o du | [fold-PROG AUX.PRS] |
| butrja:simu | butr-jai-f-o du | [rub-TR-PROG AUX.PRS] |
| dabfimu | dab-fo du | [pull-MDL-PROG AUX.PRS] |
| sikja:fimu | sik-ja:-f-o du | [move-TR-PROG AUX.PRS] |
| $t^{\text {h }}$ kjSimu | $t^{\text {h }} u k-\int-o d u$ | [meet-MDL-Prog aux.Prs] |
| legtimu | leg-tf-o du | [burn-MDL-PROG AUX.PRS] |


| (236) | ts ${ }^{\text {ets }}{ }^{\text {hats gas-o: }}$ | ti-o | to-S |
| :---: | :---: | :---: | :---: |
|  | girl garment-PL | wash-Prog | AUX-3H |
|  | 'The girl is washing | hes.' |  |



With a restricted set of verbs the progressive aspect marker is realized as $-u$. In some of these instances the regular progressive aspect marker is also attested in our material. Examples, $d z o-u$ [eat-PROG]; to-u [keep-PRoG] $\sim p h j o(-o), p^{h j o-}$ $u$ [take.away-PROG]; bjo-u ~bo-o [go-PROG].

The progressive aspect marker, like other aspect markers, also occurs in some non-final clauses. First, it functions in some cases in a participial usage as a noun modifier indicating an ongoing action.

```
(238) fl-o mi
    die-PROG man
    'The dying man (= he is not dead yet; he is in the process of dying)'
```

But in other instances the progressive aspect is not possible, and the habitual aspect marker occurs instead. For example,
(239) krab-ts / *krab-o thay
cry-HAB / cry-prog boy
'the crying boy'
(240) jag-ts / *jag-o that
sleep-нав / sleep-prog boy
'the boy who is sleeping', 'the boy who sleeps'
(241) matiy-u den tof-id / *tof-o thay
floor-poss on sit-HAB child
'The child who is sitting on the floor'
(242) ga-s githay lan-ts / *an-o mi-paך tay-o-k

1SG-ERG song make-HAB/make-PROG man-DAT observe-PST-1SG
'I looked at the man while he (= the man) was singing.'
'I looked at the man while I was singing.'

Second, it also occurs as a non-final clause verb in the clause chain construction, where it describes temporal overlap.
(243) suradz-is krab-o=gi tseik ray-o
i.name-ERG cry-PROG=EMP all tell.1/2O-PST
'Crying, Suraj told (me) everything.'

The progressive marker is also used for the immediate future:

```
(244) ga hun bjo-u/*bjo-ts to-k
    1SG.NOM now go-Prog / go-HAB AUX-1SG
    'I am going now'
(245) ga nasom hju taim-o bus-o tof-o
    1SG.NOM tomorrow now time-LOC bus-LOC sit-PROG
    ni-ta-k
    AUX-FUT-1SG
    'Tomorrow by this time I'll be in the bus'
```

In some instances the time-span of an event is longer than the speech-time. In the following example the progressive marker occurs in a situation which could be taken as a habitual description.
(246) gun-o june no badze dzar-o du/to-f winter-LOC sun nine time rise-PROG AUX.PRS / AUX.PRS-3H '(This year) during winter sun rises at nine o'clock'

While if we want to say 'during winters' (not a particular year's winter, but during winter generally speaking), the habitual marker occurs instead.
(247) gun-o june no badze dzar-ts du/to- $\int$ winter-LOC sun nine time rise-IPFV AUX.PRS / AUX.PRS-3H 'During winters the sun (normally) rises at nine o'clock'

### 4.6 Negation

4.6.1 Copula Negation

As Table 25 shows, the two negative copula forms in the present tense, are: (i) $m a-n i$ and (ii) NEG-IDX. The latter has a neutral negative interpretation, while $m a-n i$ has a contrastive interpretation. Like the copula $n i$ in the declarative clauses, ma-ni negates what the other person is claiming. Further, as in the declarative clauses, in the negative construction too, it does not take any inflectional ending.

In the past tense, mats ${ }^{h}$, ma-ke-IDx, ma-du-ge and $m a$-du-gjo function as the negative copula (equational, existential) forms. ma-du-ge occurs with third person non-honorific subjects and ma-ke-IDx occurs with third person honorific subjects as well as with first/second person subjects. Note that in ma-ke-IDx [NEG-PST-IDX] there is no copula. One possible scenario could be that the cop-
ula to gets deleted in the negative copula constructions with non-3 subjects, but retains the past allomorph $-k e$, resulting in $m a-k e$-IDX (NEG-PST-IDX).
table 25 Negation: Equational and existential copula (Present tense)

|  | SG | DU/PL |
| :---: | :---: | :---: |
| 1 | $m a-n i$ | ma-ni |
|  | $m a-k$ | $m a-t \int(\mathrm{DU}, \mathrm{EXCL})$ |
|  |  | $m a-m e(\mathrm{INCL})$ |
|  |  | *ma-suך |
| 2H | $m a-n i$ | ma-ni |
|  | ma-n | $m a-t j$ |
|  |  | *ma-suך |
| 2NH | $m a-n i$ | ma-ni |
|  | $m a-n$ | ma-n(-o:) |
|  |  | *ma-suך |
| 3 NH (animate, inanimate) | $m a-n i$ | ma-ni |
|  | $m a-d u$ | ma-du |
|  | *ma-to | *ma-to, *ma-suך |
| 3 H (animate, inanimate) | $m a-n i$ | ma-ni |
|  | $m a-\int$ | ma-j(-o:) |
|  | *ma-du- ${ }^{\text {, }}{ }^{\text {a }}$ *ma-to- $\int$ | $m a-s u \eta ~(H, ~ D U) ~$ |
|  |  | *ma-du- ${ }^{\text {* }}$ * ma-to- |

(248) ga kim-o mats ${ }^{h} /$ ma-ke-k

1SG.NOM house-LOC NEG.COP.PST NEG-PST-1SG
'I was not at home.'
(249) ka kim-o matsh / ma-ke-n

2SG.NH house-LOC NEG.COP.PST NEG-PST-2SG.NH
'You were not at home.'

```
(250) do kim-o mats \({ }^{h}\) / ma-du-ge / ma-du-gjo
    3SG house-LOC NEG.COP.PST NEG-COP-PST NEG-COP-PST
    'S/He was not at home.'
```

90 ma-du- $\int$ occurs in the experiencer subject construction. For example, do-gor- $n(u) d u k^{h} a \eta$ ma-du- $\int$ [3-PL-DAT.PL sad NEG-COP-3SG.H] 'They are not sad'.

| (251) | do-go: kim-o mats $/$ / ma-du-ge |
| :---: | :---: |
|  | 3-PL house-LOC NEG.COP.PST NEG-COP-PST 'They were not at home.' |
| (252) | ga rapk mats / $/$ ma-ke-k |
|  | 1SG.NOM tall NEG.COP.PST / NEG-PST-1SG 'I was not tall.' |
| (253) | ka rayk mats $/$ / ma-ke-n |
|  | 2SG.NH tall NEG.COP.PST / NEG-PST-2SG.NH 'You were not tall.' |
| (254) | ```do ra\etak matsh/ ma-du-ge /ma-du-gjo 3SG tall NEG.COP.PST / NEG-COP-PST 'S/He was not tall.'``` |
| (255) | do-go: rajk mats ${ }^{h}$ / ma-du-ge /ma-du-gjo 3-PL tall NEG.COP.PST / NEG-COP-PST 'S/He was not tall.' |

mats ${ }^{h}$ also has a 'without' interpretation. It occurs in all tenses.

```
(256) tsi:ni matsh tfa(:) to / to-ke/ ni-to
    sugar NEG.COP.PST tea COP.PRS / COP-PST / COP-FUT
    'The tea is / was / will be without sugar.'
```

(257) $k^{h}$ ou mats ${ }^{h}$ kim-o- $t f \quad$ hala bjo du- $n$
food NEG.cop.pst house-LOC-ABL how go.PROG AUX-2SG.H
'How are you leaving home without food.'

The negative copulas also occur in the following 'or not'-constructions.

| (258) | kisi babu to- $t-a \quad m a-t f$ |
| :--- | :--- |
|  | 2DU clerk cop-2PL.H-Q NEG-2PL.H |
|  | 'Are the two of you clerks or not?' |

(259) do kim-o du-a ma-du
3SG house-LOC cOP.PRS-Q NEG-COP.PRS
'Is he in the house or not?'

```
(26o) do babu du-ge-a ma-du-ge
    3SG clerk COP-PST-Q NEG-COP-PST
    'Was he a clerk or not?'
```

Table 26 summarizes the distribution of the negative copulas in the future tense.

TABLE 26 Equational and existential copula negation:
Future tense

SG PL

| 1 | ma-ni-k | ma-ni-tf (DU, EXCL) |
| :--- | :--- | :--- |
|  |  | $m a-n i-m e ~(\mathrm{INCL})$ |
| 2H | ma-ni-n | ma-ni-t |
| 2NH | ma-ni-n | ma-ni-n(-o:) |
| 3NH | ma-ni-to | ma-ni-to |
| 3H | ma-ni- | ma-ni-suך (DU, H$),$ ma-ni-f(-o: $)$ |

### 4.6.2 Negation in Non-Copula Constructions

In the non-prohibitive non-copula constructions in Kinnauri, the negative marker is ma-. It occurs in all tenses and aspects. In the negative finite verb structure NEG-V(-O.IDX)(-TNS)-IDX, in most cases, there is no explicit tense marker when there is an indexing marker. Temporal interpretation is gathered from the context. There are some verbs which permit an explicit past tense marker. E.g. ma-tuŋ-o-k [NEG-drink-PST-1SG], but even with verbs such as these which allow the past tense marker, the alternative verb form with no past tense marker is also possible here. For example, ma-tuy-k [NEG-drink-1SG] can have a past as well as a future interpretation in appropriate context.

In the finite verb structure V (-O.IDX)-ASP AUX(-TNS)(-IDX), ma- may be prefixed either to the main verb or to the auxiliary.

> (261) hun-nja tha-ts-i ma-ta:~ta: ker-o-n now-day what-DIm-EMP NEG-keep~PFV GIVE-PST-2NH 'Now there was nothing left.'
(262) ga-s sara badzair dzog~dzog ma-fe-k 1SG-ERG whole market buy~PFV NEG-SEND-1SG 'I did not buy the entire market.'

The negative marker ma- also occurs in non-final clauses.
(263) hasal ma-jun-mig dam ni-ts
fast NEG-walk-NMLZ good stay-HAB
'It is good not to walk fast.'
(264) ki ma-khja~khja ba:te~te

2SG.H NEG-see~PFV speak~PFV
'You spoke without having seen.'

Lastly, the negative marker occurs also in a frozen expression ma-ni-ma, roughly meaning 'otherwise'.
(265) ma-ni-ma ta fi-tz-k nEG-STAY-NMLZ FOC die-FUT-1SG
'(Give me food), Otherwise, (I) will die.'

The IA negative morpheme na occurs, at times, in natural discourse as a tag question.
(266) ki ta nasom bjo-ti-n be na

2SG.H FOC tomorrow go-FUT-2SG.H DSM NEG
'You will go tomorrow, right?'
4.7 Imperative and Prohibitive
4.7.1 Imperative

The verb 'come' is the only verb that has two separate verb forms for nonimperative and imperative, namely, ba (NIMP) and $d \delta i^{91}$ (IMP).
(267) bapu paŋ $k^{h} j a \sim k^{h} j a$ dji-ri-n
father DAT see $\sim$ PFV come.IMP-IMP-2H
'(After) having seen (our) father, (please) come (back)!'

Other verbs take one of the following inflectional endings (Saxena 2002):
(РROH-)V-IMP(-1/2O) -IMP: -rin :-in/- $n:-i t / /-t f:-r a:-o:-u: \emptyset$
$91 \quad d \xi i$ is realized as $d z a$ in the narratives when it is followed by the imperative marker - $r a$ (i.e.,
$d \xi z-r a)$.

While most verbs permit the zero imperative marker (e.g. bjo [go.imp], ${ }^{92}$ ray [tell.1/20.IMP], haled [stroll/take.a.walk.IMP], vad [laugh.IMP], sad [kill.IMP], ran [give.Imp], $p a$ [depart.IMP], tup [drink.IMp], $p^{h j o ~[t a k e . a w a y . I M p], ~} p^{h o l}$ [tear.IMP], gol [tear.IMP]), a restricted set of verbs take -o or -u instead (e.g. $n i-j u$ [stay-IMP], $k^{h_{j}-o}$ [see-IMP]). Note that verbs permit either the zero alternative or the $-o /-u$ alternative (except for the verb $d z i$ [come.Imp] which does not allow either of the two alternatives). The occurrence of $-i$ in the suffixes $-i n /-n$ and $-i t / /-t \int$ is phonologically conditioned. It occurs when the verb stem ends with a consonant. The various inflectional endings are exemplified here:

|  | -rin | -in/-n | $-i t / /-t f^{\prime}$ | $-r a$ | $\emptyset$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| rannu 'to give' | ran-rin | ran-in | ran-it | ran-ra | ran |
| кети [give.1/20.InF] | ke-rin | ke-n | $k e-t f$ | ke-ra | kjo *ke |
| temu 'to write' | te-rin | $t e-n$ | $t e-t y$ | te-ra | tjo *te |
| dza:mu 'to eat' | dzai-rin | dzai-n | dzai-t $f$ | dzai-ra | dzo |
| lannu 'to make' | lan-rin | lan-in | lan-it | lan-ra | lan |
| pannu 'to depart' | pa-rin | pa-in | pa-it | pa-ra | $p a$ |
| thismu 'to hit the ground' | this-rin | this-in | this-itf | this-ra | this |
| $d z i$ [come.imp] | dsi-rin | dsi-n | $d s i-t f$ | $d \leq i-r a$ | ${ }^{*} d j i,{ }^{*} d z 0,{ }^{*} d z u$ |

The following examples illustrate the imperative verb inflectional suffixes.
(268) hales ni-ma=le ta:~ta: tai-rin
how stay-NMLZ=TOO keep~PFV KEEP-IMP
'(The king wrote): "Whatever he is like, please keep (our son)."'
(269) hode-ray ay-u ba:t-ja:-dzi-ri-tf

DEM.DIST.NVIS.LOC-COM 1SG-DAT talk-TR-1/2O-IMP-2PL
'(When you get tired,) then call me.'

92 In a small set of verbs, the zero-marked imperative is the same as one of the past verb forms with third person non-honorific subjects (do bjo [3SG go.PST] 'he went', bjo [go.Imp] 'Go!'; rakses-is p ${ }^{h j o}$ [demon-ERG take.away.PST] 'The demon took away (the daughter)', $p^{h}{ }^{\text {jo }}$ [take.away.IMP] 'take off!'). The distinction in function is indicated here by means of intonation/prosody and the discourse context of the utterance. Further, while the verb form is often repeated while giving orders, this seldom occurs with declaratives in natural discourse.

```
(270) bjo-n / bi-n \({ }^{93}\)
    go-IMP
    ‘(Please) go!’
(271) \(k^{h} o u\) tai~ta: to dza:-ra \({ }^{94}\)
    food keep~PFV cop.prs eat-IMP
    'The food is kept there. Eat (it)!'
```

(272) kui-u hara: ran
dog-DAT bone.pl give.IMP
'Give the bones to the dog!'
$-\mu$ is the 2 SG.H subject indexing marker and $-t \int$ is the 2 PL.H subject indexing marker (see Section 4.2). In the imperative constructions -tf also occurs, at times, with singular subjects and in situations where the referent is a member of a group (e.g. while the direct referent is one sister, who, in this scene, is together with her other sisters).
(273) pə mi fiy-o: kar-mu bjo-tf id ay rig-o: four man wood-Pl bring-INF go-2PL one 1SG.NNOM louse-PL
ts ${ }^{h}$ ago. ${ }^{95} k^{h j a-m u / k^{h} i-m u^{96}}$ kim-o tof-i-tf
whatnot see-Inf house-LOC sit-IMP-2PL
'"Four (of you) go to take (bring) wood! One (of you) stay at home to see my lice, etc.!"'

The distribution of the imperative verb inflectional morphology reflects a complex interplay of a range of semantic and pragmatic factors. Variables such as honorificity, social hierarchy, cultural norms about displaying respect, relative age of interlocutors, and whether the utterance should be viewed as a concise instruction, a suggestion, an advice or a command are some determinant factors concerning the choice of the imperative markers (see Saxena 2007 for details).

93 Dialectal difference.
94 When the verb stem ends with an $-r$ before the imperative suffix $-r a$, the former is deleted. E.g. fupa ibaray $p^{h} O$ Oa raŋ fino kara 'in the evening bring a sackfull of deer meat and a sackfull of wood.' (karmu 'to bring').
95 tsha-go: [what-PL].
96 Dialectal difference.

The various imperative suffixes encode different points on the continuum. -rin is the most polite form of requesting (weak command) and $\emptyset$ (zero) / -o / $-u$ is the most "direct" form of command. There are examples which could be viewed both as an advice urging and as an instruction in the narrative data corpus. The choice of the imperative marker by the speaker seems to reflect the perspective which s/he takes in such cases.

An example illustrating the use of the imperative markers in Kinnauri narratives is presented below. ${ }^{97}$ It illustrates the determinant role socio-cultural factors play in the choice of the imperative markers. In (274) we have two instances of the imperative markers (bi-n and lo-rin).

The choice of two different types of imperatives within the same context by the same speaker (narrator of the story as well as the speaker in the story) illustrate how the socio-cultural and pragmatic values are discretely encoded in the choice of the grammatical markers in Kinnauri. In the Kinnauri speech community one may give instructions to one's sisters (even in respectful situations), whereas giving concise instructions command to (about) one's father normally is to be avoided.
(274) jal~jal lo-kjo tseik-u gato-ts-(s)e: pəŋ bi-n bapu tire $\sim$ PFV tell-PST all-POSS small-DIM-CNTR.F DAT go-IMP father pay lo-rin
DAT say-IMP
'Having gotten tired, they told the youngest (sister): "Please go, and tell (call) our father!"'

The imperative verb form is, at times, followed by (-)le: [lع:]. ${ }^{98}$ It functions as a request marker.

```
(275) pita\eta to\eta-i-n le: baits-e99
    door open-IMP-SG.H REQUEST sister-vOCATIVE
    'Please open the door, sister!'
```

[^26]```
(276) dim-le: borthay
    close-REQUEST tree
    'Please, close (yourself), tree!'
```

4.7.2 Prohibitive

As the following examples illustrate, prohibitives in Kinnauri have the same structure as the imperatives, except for the additional prohibitive morpheme $t^{h} a$ - which is prefixed to the verb.
$t^{h} a$-V-rin
(277) ga tha $d a \sim d a \quad \int i-m a \quad a \eta-u \quad t^{h} a-p o g-t f l$-rin

1SG.NOM what fall~PFV die-NMLZ 1SG-DAT PROH-burn-1/2O-IMP
'Irrespective of what happens to me, please don't burn me.'

```
    \(t^{h} a-V-t f \mid t^{h} a-V-i t f\)
(278) \(t^{h} a-n i-t f\)
    PROH-stay-2PL.H
    'Don't stay (here)!'
    \(t^{h} a-V-i n / t^{h} a-V-n\)
(279) ay ner-o \(t^{h} a-d z i-n\)
    1SG.NNOM near-LOC PROH-come.IMP-IMP
    'Don't come near me!'
```

(28o) ki-nu rəŋ-o-k $t^{h} a-b j o-n / t^{h} a-b i-n$
2SG.H-DAT.PL tell.1/2O-PST-1SG PROH-go-IMP
'(I told) you "Don't go".'
$t^{h} a-V-r a$
(281) ay $t^{h} a y-o: t^{h} a$-dza:-ra
1SG.NNOM son-PL PROH-eat-IMP
'Don't eat my sons!'
(282) $t^{h} a-d z a:$
PROH-eat
'Don't eat!'

## 5 <br> Clauses and Sentences

The most frequent word order in Kinnauri is SOV.

```
(283) ga ta tseik-u lo-ta-k
    1SG.NOM FOC all-DAT tell-FUT-1SG
    'I will tell everyone.'
```

(284) do rakses-is ama-boa-nu thagai-a
DEM.DIST.NVIS demon-ERG father-mother-DAT.PL cheat.PST
'That demon duped the parents.'
(285) ama $t^{h} a y-u$ gas-o: ran-o- $\int$
mother child-DAT cloth-PL give-PST-3H
'Mother gave the child clothes.'
(286) do-s arti-pəך seo re- $\int$
3SG-ERG i.name-DAT apple sell-3H
'He sold Aarti an apple.'

There are, however, also many instances where a varying word order is found.

```
(287) id du-gjo rudza-ts \({ }^{100}\)
    one cop-pst o.man-dim
    '(There) was an old (pitiful) man.'
```

(288) kif-u baits-o:-nu ta rakses-is dza:~dza:
2SG.H=two-POSS y.sibling-PL-DAT.PL FOC demon-ERG eat~PFV
'The demon has eaten your sisters.'

### 5.1 Experiencer Subjects

As is the case with many South Asian languages, Kinnauri, too, has the so-called experiencer subject (or dative subject) construction, where a dative marked argument occurs with non-volitional verbs such as porennu 'to find', gja:mu 'to like, to want', tsalmu 'to feel' and thasmu 'to hear'.

[^27]```
(289) do-paך katab por-e-kjo
    3SG-DAT book find-INTR-PST
    'He found a book (accidentally).'
(290) ay-u thas-im bad-o \(d u / t o /{ }^{*} t o-\int / * d u-\int\)
    1SG-DAT hear-NMLZ come-PROG AUX.PRS AUX.PRS-3H
    'I can hear.' (I am able to hear; it is possible for me to hear.)
```

The dative marked argument occurs in a variety of constructions. It occurs, for example, in constructions which describe bodily conditions and emotional states.

```
(291) ay-u \(\quad \partial k^{h} a\) to /? \(d u /{ }^{*} t o-\int /{ }^{*} d u-\int\)
    1SG-DAT pain COP.PRS COP.PRS-3H
    'I have pain.'
(292) ama (-)pəך dukhaŋ du- \(/{ }^{*} t o-\int\)
    mother (-)DAT sad COP.PRS-3H
    'Mother is sad.'
```

It also occurs in the obligative construction.

```
(293) do-pəŋ dzəŋ ma-bə-n gja:-mig du-ge /to-ke /
    3SG-DAT here NEG-come-NMLZ want-NMLZ COP-PST
    *du-ge- \(\int /{ }^{*} t o-k e-\int\)
    COP-PST-3H
    'He should not have come here.'
(294) aŋ-u dzəŋ ma-bə-n gja:-mig to-ke /du-ge /
    1SG-DAT here NEG-come-NMLZ want-NMLZ COP-PST
    *to-ke- \(\int\) *du-ge- \(\int\)
    COP-PST-3H
    'I shouldn't have come here.'
```

The experiencer subject occurs in copula constructions (e.g. [N-dAT pain( N ) cOP]) as well as in non-copula constructions. The copula constructions take the copulas to and $d u$. The copulas here occur with all persons in past and present tenses (see examples 291-294). This indicates that the experiencer subject construction has a structural third person subject, since $d u$ normally occurs only with third person subjects (see Section 4.4).

```
(295) ni\etao-nu akha to /*du/ *to-\int/ *du-\int
    1PL.EXCL-DAT.PL pain COP.PRS COP.PRS-3H
    'We have pain.'
(296) ka-nu akha du-ge/to-ke/ *du-ge-n
    2SG.NH-DAT.PL pain COP-PST COP-PST-2SG.NH
    'You had pain.'
(297) ki-nu akha du-ge /to-ke / *du-ge-\int/ *to-ke-\int
    2SG.H-DAT.PL pain COP-PST COP-PST-3H
    'You had pain.'
(298) do-pə\eta ak'a du 101/to/du-\int/*to-\int
    3SG-DAT pain cop.PRS COP.PRS-3H
    'He has pain.'
```

The following examples illustrate the experiencer subject construction in noncopula constructions-in the finite verb structures V(-o.idx)-ASP AUX(-IDx) and $V(-$ o.idx $)$-TNS(-IDx).
(299) ay-u ta-o lan-tf-o du/to/ *du-f/ *to-f

1SG-dat fever-LOc make-1/2O-PRog aux.PRS aux.PRS-3H 'I am having fever.'
(300) ki-nu $\quad k^{h} a$ kar-o du-ge ${ }^{102}$ / *to-ke / du-ge-f/to-ke-f 2SG.H-DAT.PL pain bring-prog aux-pst aux-Pst-3H 'You were having pain.'
(301) ravi pay ja:d de-o hat ba~ba
i.name dat memory feel.internally-PST who come~PFV
to- $\int$
aUX.PRS-3H
'Ravi is remembering who has come.'
These examples also show that the dative marked argument does not control the subject indexing on the verb. Further, as these examples illustrate, if the

[^28]dative marked argument is either first or second person, in a clause with a transitive verb the object indexing marker ( $-t f$ or a change in the verb form in the case of the verb 'to give') occurs on the verb, also suggesting that the dative marked argument does not behave like a subject. Concerning the word order, however, the dative marked argument occurs in the same position as non-experiencer subjects which is the default, the most frequently occurring position of a subject.

Dative experiencers are subject-like in their word order, but non-subject-like when it comes to indexing patterns. Even though the word order is relatively free in Kinnauri, the most frequent order of constituents in natural discourse is SOV. In the dative experiencer construction, the default order of constituents is one where the dative marked argument comes first, before any other verb arguments.

### 5.2 Questions

In content questions the word order and the verb inflectional endings remain the same as in the corresponding declarative statements. See Section 3.3.3 for a description of the interrogative pronouns and adverbs.
(302) ravi bof-is hat-e: bo~bo to- $\int(-o:)$
i.name forget-PFV who-PL come $\sim$ PFV AUX- $3 \mathrm{H}(-\mathrm{PL})$
'Ravi forgets who (all) came.'
(303) ki hat-sja: defo-tf to-n

2SG.H which-CNTR.M village-LOC-ABL COP-2SG.H
'Which village are you from?'
(304) bei niŋo-nu baits ham to-f

EXPL 1PLE-POSS.PL y.sibling where COP-3H
'Oh! Where is our younger sister?'
(305) do-s tetra rot-e: dza:-gjo

3SG-ERG how.many bread-PL eat-PST
'How many (pieces of) bread did he eat?'
(306) pja-ts ay nums the bad-o du
bird-DIM 1SG.NNOM after why come-PROG AUX.PRS
'Why is the bird coming after (following) me?'
(307) ki bruf hala lan-ti-n

2SG.H brush how make-FUT-2SG.H
'How will you brush (your teeth)?'
(308) ki bruf hales un-ti-n

2SG.H brush which.kind take-FUT-2SG.H
'Which type of brush (soft, hard, small, large) will you buy?'

Polar questions are formed by affixing $-a$ to the finite verb. The question suffix $-a$ does not occur in content questions.
(309) gə faygi to-k-a

1SG.NOM alive COP-1SG-Q
'Am I alive (or, am I dreaming)?'
(310) dzaŋ-u dejaŋ gja:-ti-n-a gold-poss body want-FUT-2H-Q
'Do (you) want a body of gold?'
(311) tha tyütfũ pju-ts nif-u baits-o: taŋ-o-n-a
what SND mouse-DIM two-POss y.sibling-PL observe-PST-2NH-Q '(The girls said:) "chuchu, mouse, have you seen (our) two sisters?"'
(312) hodo nif tshetsats-o: ba-a

DEM.DIST.NVIS two girl-PL come-Q
'Did those two girls come (here)?'

Appendix 2A: Kinnauri Basic Vocabulary<br>(by Anju Saxena and Santosh Negi)

This is the Kinnauri IDS/LWT list. It has been compiled on the basis of the 1,310 items of the original Intercontinental Dictionary Series concept list (Borin et al. 2013) plus the 150 items added to it in the Loanword Typology project, for a total of 1,460 concepts (Haspelmath and Tadmor 2009). Further, some new entries have also been added in the present project. In the new entries the minor part of their concept ID (the part after the point) begins with "999", e.g. "S24.9991o someone". There are 78 such additions in the Kinnauri list. Some IDS/LWT items have been left out from this list, as there were no equivalents in Kinnauri or in my material. The resulting list as given below contains 1,348 items (concepts), where occasionally more than one Kinnauri equivalent is provided. The list also includes loanwords.

## 2A. $1 \quad$ Notational Conventions

For ease of comparison we have kept the original IDS/LWT glosses unchanged in all cases, and Kinnauri senses which do not fit the IDS/LWT meaning completely are given more exact glosses in the Kinnauri column. Sometimes there will be multiple (separately glossed) items in the Kinnauri column when Kinnauri exhibits lexical or dialectal differentiation of meaning or form within an IDS/LWT item. Pronunciation or form variants are separated by commas, and formally distinct items are separated by semicolons. Glosses and notes belong with their enclosing "semicolon grouping".

As in the main text, Kinnauri items are set in italics without morphological decomposition, i.e. affixes and clitics are written solid with their stem or host. Glosses are set in roman, either in single quotes (translation, corresponding to the last line in an interlinear glossed text unit) or in square brackets (morphological analysis, corresponding to the middle line in interlinear glossed text, and adhering to the Leipzig Glossing Rules, in some cases preceded by a morphologically segmented representation of the Kinnauri item in italics, corresponding to the first line in interlinear glossed text).

The Kinnauri data has been collected in three villages where slightly different local varieties of Kinnauri are spoken, and some items in the Kinnauri column are marked with their geographical origin: "(S)": Sangla; "(R)": Ropa; "(B)": Brua.

## 2A. 2 The Kinnauri IDS/LWT List

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So1.100 | the world | dunija;; sansair, sensa:r |
| So1.210 | the land | milkus; ma:ldogay |
| So1.212 | the soil | matip |
| Sol. 213 | the dust | purtuatip |
| So1.214 | the mud | tsikar; lass |
| So1.215 | the sand | ba:lay; ba:lin |
| So1.220 | the mountain or hill | ra: $;$; dok ${ }^{h} a y$ 'tall, big mountain'; $t^{h}$ oll 'small mountain' |
| So1.222 | the cliff or precipice | dair, da:ray; $k^{\text {horo }}$ dok ${ }^{\text {hay }}$ |
| Sol. 230 | the plain | sormay |
| So1.240 | the valley | ga:ti; $k^{h}$ ago; $k^{h} u n a y$ |
| So1.250 | the island | ta:pu |
| So1.270 | the shore | garatiy |
| So1.280 | the cave | ag |
| So1.310 | the water | $t i$ |
| Sol. 320 | the sea | somodray 'sea; ocean; river' |
| So1. 322 | calm | sululutis |
| Sol. 323 | rough(2) | bo:la: |
| So1. 324 | the foam | fub |
| So1.329 | the ocean | somodray 'sea; ocean; river' |
| So1.330 | the lake | soray 'natural pond' |
| So1.350 | the wave | ts ${ }^{\text {ateray }}$ |
| Sol.360 | the river or stream | ga:ray 'river'; na:lay 'stream'; somodray 'sea; ocean, river' |
| So1.362 | the whirlpool | sagti |
| So1.370 | the spring or well | kuay, koay 'well' |
| Sol.380 | the swamp | diba:lin |
| So1.390 | the waterfall | $t^{\text {h }}$ oday |
| So1.410 | the woods or forest | boniy, baunay; dzaygal |
| So1.430 | the wood | fiy |
| So1.440 | the stone or rock | rag; pan 'stone; slate'; $k^{h} a t l a y ~ ' r o u n d ~ r e d ~ s t o n e s ~$ found in rivers'; fay 'pebble' |
| So1.450 | the earthquake | buntilay |
| So1.510 | the sky | sorgay |
| So1.520 | the sun | june; surads |

## (cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So1.530 | the moon | golsay; fland |
| So1.550 | the lightning | bidzul 'lightning (bolt)' |
| So1.540 | the star | (s)kar |
| So1.56o | the thunder | gurgur |
| So1.570 | the bolt of lightning | bidzul 'lightning (bolt)' |
| So1.580 | the storm | daro 'rainstorm' |
| So1.590 | the rainbow | tila:nmets |
| So1.610 | the light | ts ${ }^{\text {atatk }}$ |
| So1.620 | the darkness | ajares (S), apaires (B) |
| So1.630 | the shade or shadow | lai; filay; tha:jay |
| So1.640 | the dew | ofay |
| So1.710 | the air | la:n 'air; wind' |
| So1.720 | the wind | la:n 'air; wind' |
| So1.730 | the cloud | dзu; dzufa (R) |
| So1.740 | the fog | dumay 'fog; smoke'; duma:saך, duma:so |
| So1.750 | the rain | goeniy; tharva (R) |
| So1.760 | the snow | pom; tit ${ }^{\text {hokolts 'watery snow' }}$ |
| So1.770 | the ice | $t^{\text {hanay }}$ |
| So1.7750 | to freeze | ла:nennu |
| So1.780 | the weather | mosam |
| So1.810 | the fire | me: |
| So1.820 | the flame | melab; lapan |
| So1.830 | the smoke | dumay 'fog; smoke' |
| So1.8310 | the steam | van |
| So1.840 | the ash | bospa |
| So1.841 | the embers | $t^{h} 0 ; \int u t^{\text {hol }}$ |
| So1.851 | to burn(1) | pogmu (TR); legmu (TR) |
| So1.852 | to burn(2) | barmu (INTR); bogmu 'to get burned'; legtimu 'to get burned'; |
| So1.860 | to light | tonnu (TR); parmu (TR) 'to set on fire' |
| So1.861 | to extinguish | рјиgmu |
| So1.870 | the match | mefin, me: $\int \downarrow$ |
| So1.880 | the firewood | parfiy; say 'a wood-type with natural oil, used as kindling' |
| So1.890 | the charcoal | $\left(\right.$ (in) $t^{h^{\prime}}$ |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So1.99903 | the coal | relu $t^{\text {ho }}$ |
| So2.100 | the person | manuf; mi |
| So2.210 | the man | morthay; mi |
| So2.220 | the woman | ts ${ }^{\text {hetses }}$ 'adult woman (usually married)'; ts ${ }^{h}$ esmi 'woman, married; wife' |
| So2.240 | female(1) | mant- 'female (animals)' |
| So2.250 | the boy | $t^{\text {h }}$ ay 'boy (newborn to appr. 16-18 years of age); son (one's own or family's child)'; kutu; tuna;; dek'ra:ts; thak 'boy, son' |
| So2.251 | the young man | dek ${ }^{h}$ ra:ts 'boy; young man appr. 18-30 years of age, usually unmarried' |
| So2.260 | the girl | timed 'girl; daughter'; tshetsats 'girl; young woman (from birth to marrying age); daughter'; dek ${ }^{h}$ orits 'young girl (before she reaches marrying age)' |
| So2.261 | the young woman | dek ${ }^{\text {h or }}$ |
| So2.280 | the baby | ajanapts; dzormets |
| So2.310 | the husband | $t^{\text {ho }}$ O $(m i)$; daits |
| So2.320 | the wife | gone; s $^{h}$ esmi ' wife; married woman'; lari 'bride; wife; daughter-in-law'; sok 'co-wife; sister-in-law'; gunjale 'bride' |
| So2.330 | to marry | ranekay lannu; Jadi lannu; bajay lannu |
| So2.340 | the wedding | bajay; ranekay; Jadi |
| So2.350 | the father | bon; boa, boba 'father; paternal uncle'; bapu 'father; father's younger brother' |
| So2.360 | the mother | ama; mən; mata |
| So2.370 | the parents | manbon; amaboa |
| So2.380 | the married man | ranekay lants mi |
| So2.390 | the married woman | ts ${ }^{h}$ esmi 'married woman, wife'; tshetses 'woman, adult (usually married)'; ranekay lants ts ${ }^{h}$ esmi |
| So2.410 | the son | $t^{\text {h }} a k$; kutu; $t^{\text {h }} a y(t s)$ 'boy; son of the speaker or someone belonging to the speakers family'; beta |
| So2.420 | the daughter | timed 'girl; daughter'; beti |
| So2.440 | the brother | bai; juydz |
| So2.444 | the older brother | ate |
| So2.445 | the younger brother | beits 'woman's younger brother'; baja(ts) 'man's younger brother' |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So2.450 | the sister | rindz; ben (B); baits (S) |
| So2.454 | the older sister | (teg) dau(ts); tege; teg riydz; aputs (Ribba) |
| So2.455 | the younger sister | (tshetsats) beits (B); baja(ts) (S) |
| So2.456 | the sibling | juyrin |
| So2.4562 | the younger sibling | bai(ts) (S); beits (B) |
| So2.458 | the twins | dzo:la |
| So2.460 | the grandfather | tete |
| So2.461 | the old man | rudza(ts) 'old and weak man' |
| So2.470 | the grandmother | api; mapo api 'maternal grandmother' |
| So2.471 | the old woman | jaydze(ts) 'old (human female, animate female)' |
| So2.4711 | the grandparents | teteapi |
| So2.480 | the grandson | dek'ra:ts pa:ts 'grandson'; dek ${ }^{\text {r}}$ ra:ts rimpa:t 'daughter's son'; dek ${ }^{\text {h }}$ ra:ts kimpa:ts 'son's son'; (s)pa:ts 'grandchild' |
| So2.5000 | the grandchild | (s)pa:ts; rimpa:ts ‘daughter's child'; kimpa:ts 'son's child' |
| So2.511 | the mother's brother | әра 'mother's brother; father-in-law'; muma: ma:ma: 'mother's brother; father-in-law' |
| So2.512 | the father's brother | bapu 'father, father's brother'; boa 'father; father's brother'; boba 'father; father's brother'; teg bua 'father's older brother' |
| So2.520 | the aunt | na:ne 'aunt (mother's brother's wife; father's sister)' |
| So2.521 | the mother's sister | amats; amri |
| So2.522 | the father's sister | na:ne 'aunt (mother's brother's wife; father's sister)' |
| So2.530 | the nephew | bandso 'man's sister's son'; thay (ts) 'woman's sister's son'; (dek${ }^{\text {hra:ts }) ~ b a n u t s ~ ' w o m a n ' s ~ b r o t h e r ' s ~ s o n ’ ~}$ |
| So2.540 | the niece | (tshetsats) banuts 'woman's brother's daughter'; timets 'woman's sister's daughter' |
| So2.5410 | the sibling's child | jupriyu thay 'sibling's son' |
| So2.560 | the ancestors | agla: (PL), agles (SG) |
| So2.570 | the descendants | pa:tsokotso |
| So2.610 | the father-in-law (of a man) | Sores; apa; mumai, ma:ma: 'mother's brother; father-in-law' |

So2.611 the father-in-law (of fores; apa; mumai, ma:ma: 'mother's brother; fathera woman) in-law'
(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So2.620 | the mother-in-law (of a man) | jumed 'mother-in-law; mother's brother's wife' |
| So2.621 | the mother-in-law (of a woman) | jumed 'mother-in-law; mother's brother's wife' |
| So2.6220 | the parents-in-law | jumedəpa |
| So2.630 | the son-in-law (of a man) | $t^{\text {had }}$ |
| So2.631 | the son-in-law (of a woman) | $t^{\text {had }}$ |
| So2.640 | the daughter-in-law (of a man) | tem |
| So2.641 | the daughter-in-law (of a woman) | tem |
| So2.710 | the stepfather | bibon; biboba |
| So2.720 | the stepmother | biama; bimən |
| So2.730 | the stepson | soku thay |
| So2.740 | the stepdaughter | soku timed |
| So2.750 | the orphan | fokray |
| So2.760 | the widow | rãdole; rants ${ }^{h}$ esmi |
| So2.770 | the widower | rãdoles 'widower (negative connotation)' |
| So2.810 | the relatives | na:tarista; ifpanek; peradzora 'closely related relatives' |
| So2.820 | the family | tobor 'family (members)'; pera( $\eta$ ) 'kinsman, clansman' |
| So2.910 | I | ga |
| So2.920 | you (singular) | $k i(\mathrm{H}) ; \mathrm{ka}$ ( NH ) |
| So2.930 | he/she/it | do [3SG.DIST.NVIS]; no [3SG.DIST.VIS]; dzo [3SG.PROX]; an [3SG.ANA] |
| So2.940 | we | nijo [1 PLE]; kija [1PLI]; kijay [1DU] |
| So2.941 | we (inclusive) | kifa [1 PLI]; kifay [1DU] |
| So2.942 | we (exclusive) | nijo [1 PLE]; kiJaך [1DU] |
| So2.950 | you (plural) | kino (H); kano (NH); kanego: (NH); kifl, kisi (2 DU.H); kanif (2DU.NH) |
| So2.960 | they | dogo: [3PL.DIST.NVIS]; nogo: [3PL.DIST.VIS]; dzogo: [3PL.PROX]; anego: [3PL.ANA] |
| So3.110 | the animal | dja:nvar, ḑanvar; semten |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So3. 120 | male(2) | (s)kjo-; dek ${ }^{\text {hres }}$ |
| So3.130 | female(2) | mant- |
| So3. 150 | the livestock | noro |
| So3.160 | the pasture | pabay 'pasture in the upper hills'; panay 'pasture close to the village' |
| So3.180 | the herdsman | pa:les |
| So3.190 | the stable or stall | $k^{h} u r a y ; t^{\text {atatay }}$ |
| So3.200 | the cattle | nortfag; dzed/dze: 'sheep; goat (SG/PL)' |
| So3.210 | the bull | tida:mes (noncastrated); da:mes (castrated); dzo 'mountain ox' |
| So3.230 | the cow | gau; lay; dzomo 'mountain cow' |
| So3. 240 | the calf | rats; mantrats (F); fakuri ( F ); fakur (M); fakras |
| So3.250 | the sheep | dzed |
| So3.260 | the ram | kar (castrated); hules (non-castrated) |
| So3.280 | the ewe | $k^{h} a s$ |
| So3.290 | the lamb | $k^{h}$ a:ts; $\int a k r a s$ (m) |
| So3.320 | the boar | su:res |
| So3.340 | the sow | su:ronig; mantsu:res |
| So3.350 | the pig | su:res (M); su:ronig ( F ; ; mansu:res ( F ) |
| So3.360 | the goat | bak ${ }^{\text {haray }}$ |
| So3.370 | the he-goat | bak ${ }^{\text {hor; }}$ áds |
| So3.380 | the kid | ma:ts |
| So3.410 | the horse | ray |
| So3.420 | the stallion | (s)kjoraך; suarrjarja ray 'gelding'; putkjakja ray ‘gelding' |
| So3.440 | the mare | mantray |
| So3.450 | the foal or colt | $t^{\text {h }}$ uru |
| So3.460 | the donkey | $p^{\text {hots }}$ |
| So3.470 | the mule | $k^{h}$ otsor |
| So3.520 | the cock/rooster | (s)kjokukari; kukkras |
| So3.540 | the hen | mantkukari |
| So3.550 | the chicken | kukzri; tikan |
| So3.560 | the goose | $k^{h}$ juppja |
| So3.570 | the duck | tiares (domesticated) |
| So3.580 | the nest | vai(ts) |
| So3.581 | the bird | $p j a(t s)$ |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So3.584 | the eagle | lampja |
| So3.585 | the hawk | dayfu:res 'hawk; falcon' |
| So3.586 | the vulture | goldes |
| So3.591 | the bat | turpjats |
| So3.592 | the parrot | tota: |
| So3.593 | the crow | ka:g; kaur |
| So3.594 | the dove | gugti:ts |
| So3.596 | the owl | dudu |
| So3.610 | the dog | kui (M, F) |
| So3.614 | the rabbit | $k^{\text {hargof 'rabbit; }}$ hare' |
| So3.620 | the cat | bilasri; pifi |
| So3.630 | the mouse or rat | $p j u(t s)$ 'house rat'; sakpju 'outdoor rat' |
| So3.650 | the fish | maty ${ }^{\text {h }}$ s, math ${ }^{\text {h }}$ i |
| So3.652 | the fin | math ${ }^{\text {esu }}$ pakhay |
| So3.720 | the lion | sip |
| So3.730 | the bear | hom; rik ${ }^{\text {a }}$ : (M); bonjots; rik $^{\text {honig ( }}$ ( F ) |
| So3.740 | the fox | falits |
| So3.750 | the deer | $p^{h}$; ; $p^{h}$ omats 'young deer'; bena '(musk) deer' |
| So3.760 | the monkey | bandres |
| So3.770 | the elephant | hat ${ }_{i}$ |
| So3.780 | the camel | ũt |
| So3.810 | the insect | ts ${ }^{\text {atig; }}$ hoy |
| So3.811 | the head louse | fomants 'young louse (hair, body)' |
| So3.8112 | the body louse | (gas)rig |
| So3.812 | the nit | rukts |
| So3.815 | the scorpion | sok ${ }^{\text {o }}$ |
| So3.817 | the ant | krog |
| So3.818 | the spider | botokts |
| So3.819 | the spider web | botoktsu ḑaliy; botoktsu va: |
| So3.820 | the bee | vasjay |
| So3.821 | the beeswax | sithay |
| So3.822 | the beehive | jaydoray;japkot |
| So3.823 | the wasp | pijay |
| So3.830 | the fly | ( $k^{h}$ ) jay $^{\text {a }}$ |
| So3.831 | the sandfly or mi or gnat | dãs 'gnat' |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So3.832 | the mosquito | tshatig |
| So3.8340 | the termites | kotkehol ${ }^{103}$ (SG) |
| So3.8350 | the tick | nəkants |
| So3.840 | the worm | hoy; lashoy 'mud worm' |
| So3.850 | the snake | sapes; naiges 'mythical snake' |
| So3.8630 | the hare | $k^{\text {hargof 'rabbit; hare' }}$ |
| So3.8650 | the quail | holafaypjats |
| So3.8690 | the squirrel | rapront |
| So3.8710 | the reindeer/caribou | barasina |
| So3.910 | the firefly | mehoy |
| So3.9170 | the buffalo | bẽ:s |
| So3.920 | the butterfly | fupjats |
| So3.930 | the grasshopper | bjonts |
| So3.940 | the snail | gotanhoy 'snail with shell'; tifam 'snail without a shell' |
| So3.950 | the frog | tijpolokts |
| So3.960 | the lizard | ts ${ }^{\text {hemar }}$ |
| So3.970 | the crocodile or alligator | magarmat ${ }^{\text {h }}$ |
| So3.980 | the turtle | ket $^{\text {h }}$ ua |
| So4.110 | the body | dejay |
| So4.120 | the skin or hide | ponay 'skin, hide, leather (of cows, oxen, buffaloes etc.)'; $k^{h} u l$ 'skin, hide (of sheep, goats, birds)' |
| So4.130 | the flesh | fa |
| So4.140 | the hair | kra: 'head hair; pubic hair' |
| So4.142 | the beard | mutshẽ; dari |
| So4. 144 | the body hair | (s)pu: |
| So4.145 | the pubic hair | kra: 'head hair; pubic hair' |
| So4. 146 | the dandruff | $k^{h}$ od |
| So4.150 | the blood | polats; fui |
| So4.151 | the vein or artery | siray |
| So4.160 | the bone | haray |

[^29](cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So4.162 | the rib | ribharay 'ribs; ribcage'; ribo: 'ribs; ribcage' |
| So4.170 | the horn | fivj; rud |
| So4.180 | the tail | patfin |
| So4.190 | the back | piftio |
| So4.191 | the spine | piftinharay |
| So4.200 | the head | bal; firay |
| So4.202 | the skull | harko:tip; balkhopti; kra:nay |
| So4.203 | the brain | dima:g |
| So4.204 | the face | muk ${ }^{\text {a }}$, 'mouth; face'; (s)to |
| So4.205 | the forehead | $p^{h j a}$ alkontay; $p^{h j a}$ |
| So4.207 | the jaw | tso:nniy |
| So4.208 | the cheek | pin |
| So4.209 | the chin | $t^{\text {hotkay, }}$, thopkay |
| So4.210 | the eye | mig |
| So4.212 | the eyebrow | migspu:, mikspu: |
| So4.213 | the eyelid | migbod |
| So4.214 | the eyelash | mig(s)pu: mikspu: |
| So4.215 | to blink | tsiptsipja:mu |
| So4.220 | the ear | ka:nay |
| So4.221 | the earlobe | (ka:nay)pots |
| So4.222 | the earwax | ka:nayk ${ }^{\text {b }}$ |
| So4.230 | the nose | takuts 'nose; beak' |
| So4.231 | the nostril | takjuliy |
| So4.232 | the nasal mucus | Sotay |
| So4.240 | the mouth | $k^{h} a k a \eta ; k^{h} a k ; ~ m u k{ }^{\text {hay }}$ 'mouth; face' |
| So4.241 | the beak | fonay |
| So4.250 | the lip | tunay |
| So4.260 | the tongue | le |
| So4.270 | the tooth | gar |
| So4.271 | the gums | (s)til |
| So4.272 | the molar tooth | kongar |
| So4.280 | the neck | golay; kakts |
| So4.281 | the nape of the neck | (ka:kts) mugro |
| So4.290 | the throat | golay 'throat; neck'; fay 'throat; narrow passage inside throat'; tiy 'windpipe, trachea' |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So4.300 | the shoulder | bid; ray 'external part of shoulder' |
| So4.301 | the shoulderblade | $p^{\text {ha }}$ fot |
| So4.302 | the collarbone | tiyharay |
| So4.310 | the arm | gud 'arm; hand'; hast 'arm; hand'; $k^{h} j u t$ 'part of the arm between wrist and elbow'; $p^{h}$ arts 'part of the arm from elbow to shoulder' |
| So4.312 | the armpit | kjasay, kjas |
| So4.320 | the elbow | krũ:ts |
| So4.330 | the hand | gud 'arm; hand'; hast 'arm; hand' |
| So4.331 | the palm of the hand | (has)talay; potilaך; $\int e(t s)$ 'palm, hollowed palm to receive water/alchohol' |
| So4.340 | the finger | prats 'finger; toe' |
| So4.342 | the thumb | bonprats |
| So4.344 | the fingernail | (pratsu) tin 'fingernail; toenail' |
| So4.345 | the claw | dzabug |
| So4.350 | the leg | peray; lat ${ }^{\text {a }}$; ; gompa; bay 'leg; foot' |
| So4.351 | the thigh | lum 'thigh; hip' |
| So4.352 | the calf of the leg | pilin(ts) |
| So4.360 | the knee | pafbay |
| So4.370 | the foot | bay 'leg; foot' |
| So4.371 | the ankle | pait |
| So4.372 | the heel | $t^{\text {hongol }}$ |
| So4.374 | the footprint | baymod |
| So4.380 | the toe | bapprats |
| So4.392 | the wing | pakhay 'wing; feather' |
| So4.393 | the feather | pul; pak'ay 'wing; feather' |
| So4.400 | the chest | (s)tug 'breast; chest'; nunu: 'breast; chest' |
| So4.410 | the breast | (s)tug 'breast; chest'; nunu: 'breast; chest' |
| So4.412 | the nipple or teat | nuni(bal) |
| So4.420 | the udder | ainay, eniy |
| So4.430 | the navel | naints |
| So4.4310 | the belly | petay 'stomach; belly'; petiy 'stomach; belly' |
| So4.440 | the heart | fin 'heart; liver'; dil 'heart; desire'; monay 'heart; desire'; dziva 'heart; soul; spirit' |
| So4.441 | the lung | $t^{\text {hab }}$ |
| So4.450 | the liver | kaledji; fin 'heart; liver' |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So4.451 | the kidney | patrapts |
| So4.460 | the stomach | petay, petiy 'stomach; belly' |
| So4.461 | the intestines or guts | ãdzay |
| So4.462 | the waist | $k^{h}$ or; gatko |
| So4.463 | the hip | lum 'thigh; hip' |
| So4.464 | the buttocks | gulin |
| So4.470 | the womb | kukhig |
| So4.490 | the testicles | halgaytso: (PL), halgayts (SG) |
| So4.492 | the penis | pjats (when talking to children) |
| So4.4930 | the vagina | teptepts (when talking to children) |
| So4.510 | to breathe | sa:say unnu |
| So4.520 | to yawn | hafkamfimu; tsonfimu 'to stretch; to yawn by stretching (one's arms)' |
| So4.521 | to hiccough | galtimu |
| So4.530 | to cough | tsu:mu; tsu: lannu |
| So4.540 | to sneeze | gismu |
| So4.550 | to perspire | dusti: donnu |
| So4.560 | to spit | $t^{\text {hu }}$ kay $p^{\text {hikja:mu }}$ |
| So4.570 | to vomit | $p^{\text {hasmu }}$ |
| So4.580 | to bite | tigmu |
| So4.590 | to lick | leтmи |
| So4.591 | to dribble | la:lay phakfimu |
| So4.610 | to sleep | jagmu |
| So4.612 | to snore | $k^{h}$ rõgennu; $k^{h}$ orennu 'to limp; to snore' |
| So4.620 | to dream | таути |
| So4.630 | to wake up | sarmu (TR) 'to raise up; to wake up'; sarfimu (human subject); jantfimu 'to experience first moment of waking up' |
| So4.640 | to fart | $k^{\text {h }}$ a sunnu |
| So4.650 | to piss | kalifennu |
| So4.660 | to shit | $k^{h}$ a $\int$ ennu |
| So4.670 | to have sex | metja: $/ \mathrm{lmu}$ |
| So4.680 | to shiver | kriymu |
| So4.690 | to bathe | sufimu (MDL); sumu (TR) |
| So4.710 | to beget | $t^{\text {ha }}$ ¢ ta:mu |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So4.720 | to be born | dzormennu |
| So4.730 | pregnant | garbvati (human); numtsu (human); magore (human); ga:bin (animal) |
| So4.732 | to conceive | $t^{\text {hobmu }}$ |
| So4.740 | to be alive | fayi пimu |
| So4.7410 | the life | dzan; maldogay |
| So4.750 | to die | Simu |
| So4.7501 | dead | Sifi |
| So4.751 | to drown | dubennu 'to drown; to sink' |
| So4.760 | to kill | sannu |
| So4.770 | the corpse | moro; imi ; $¢ \mathrm{j}$ i |
| So4.7710 | the carcass | filo:tay; finor |
| So4.780 | to bury | $k^{\text {haro Jennu }}$ |
| So4.810 | strong | dzob; dzobonsja;; takra: |
| So4.820 | weak | bila:jets; torts 'weak (healthwise)'; ko:rko:r 'weak; very thin'; ka:t ${ }^{h}$ es 'weak, malnourished or dehydrated'; ḑunt ${ }^{h} a$ 'weak (healthwise, humans or animals)' |
| So4.830 | healthy | mutag; muftit 'healthy; strong' |
| So4.840 | sick/ill | $d u k^{h} i s$ 'sick (person); sad (person)' |
| So4.841 | the fever | tao; buk ${ }^{\text {a }}$ ar |
| So4.842 | the goitre/goiter | ga:nup |
| So4.843 | the cold | $t^{\text {naj }} d i$ |
| So4.8440 | the disease | tod; duk ${ }^{\text {a }}$, ${ }^{\text {'disease; grief’ }}$ |
| So4.850 | the wound or sore | $a k^{h} a$ 'wound; sore; pain' |
| So4.852 | the bruise | fuk ${ }^{\text {hreb }}$ |
| So4.853 | the swelling | tutu |
| So4.854 | the itch | hartfo |
| So4.8541 | to scratch | harmu; bal fiktfimu 'to scratch head (hair)' |
| So4.855 | the blister | tipol |
| So4.856 | the boil | $p^{\text {h }}$ ur |
| So4.857 | the pus | tag |
| So4.858 | the scar | parray |
| So4.860 | to cure | felman lannu |
| So4.870 | the physician | daktar 'physician (modern medicine)'; bed 'traditional healer' |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So4.880 | the medicine | fel |
| So4.890 | the poison | bijay |
| So4.910 | tired | jaljal 'physically tired'; kaniy 'mentally tired' |
| So4.912 | to rest | ara:m lannu; rana Jennu; nafimu'to sit; to stay; to rest' |
| So4.920 | lazy | a:lsi; lises |
| So4.930 | bald | (pi)toylo;pitogtog '(completely) bald' |
| So4.940 | lame | $k^{h}$ orja:; lanrja: |
| So4.950 | deaf | tonja: (M, impolite), tone ( F ); ḑaro |
| So4.960 | mute | lata: (M), late: (F) 'dumb; mute’ |
| So4.970 | blind | ka:nes (м), ka:ne (F); ka:nay; ãdoliŋ |
| So4.980 | drunk | $p^{h} a s u r i j a:$ |
| So4.990 | naked | salgi |
| So5.110 | to eat | dza:mu; pasmu 'to eat (something dry, flour-like)' |
| So5.120 | the food | $k^{h}$ ou 'food; meal' |
| So5. 121 | cooked | papa; baba |
| So5.122 | raw | katfas, katfes; mafofo 'uncooked'; mababa 'uncooked'; mapapa 'uncooked (raw, e.g; carrots which can be eaten raw)' |
| So5. 123 | ripe | pakit; fofo |
| So5. 124 | unripe | tsispru |
| So5. 125 | rotten | tsis; namnam ( $k^{h} o u$ ) 'stale (food, rotten as well as non-rotten)' |
| So5.130 | to drink | tиути 'to drink; to smoke' |
| So5.140 | to be hungry | оппи |
| So5.141 | the famine | (an)ka:lay |
| So5.150 | to be thirsty | tiskarmu |
| So5.160 | to suck | tubmu; tabmu 'to suck (mother's milk)' |
| So5.180 | to chew | bragmu |
| So5.181 | to swallow | тјипти |
| So5.190 | to choke | sakubfimu; sa:lubfimu |
| So5.210 | to cook | pannu; $k^{h}$ ou lannu; bannu (INTR) 'to get cooked' |
| So5.220 | to boil | kvasmu; $k^{\text {h vatfimu (INTR) }}$ |
| So5.230 | to roast or fry | роgти 'to roast'; dammи 'to roast (wheat, oats)'; buldja:mu 'to deep-fry'; poltennu 'to turn over egg (in the frying pan)' |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So5.240 | to bake | sitja:mu 'to bake, flip over and roast pancake' |
| So5.250 | the oven | meliy; $p^{\text {ha }}$ :liy 'oven; fireplace' |
| So5.260 | the pot | patila; banes; dig 'pot with narrow neck'; baniŋ 'kitchen utensils (e.g., pots, cups)' |
| So5.270 | the kettle | ketali |
| So5.280 | the pan | bogunts |
| So5.320 | the plate | $t^{h} a: l$; palet; prat; $k^{h}$ on; nay 'a kind of bronze plate'; tenle $t^{h}$ a:l 'flat plate'; duga tha:l 'deep plate' |
| So5.330 | the bowl | duna:ts; batits 'brass bowl' |
| So5.340 | the jug/pitcher | suraji(ts) |
| So5.350 | the cup | batits 'brass cup with a foot' |
| So5.370 | the spoon | $k^{h}$ eyt |
| So5.380 | the knife(1) | tsoku 'knife (instrument to cut e.g., vegetables)'; gumts 'knife (occurs only in folktales)' |
| So5.390 | the fork | tsuka 'the fork (a fork-like cooking utensil to take out fried bread from hot oil)' |
| So5.391 | the tongs | Sonefay; tsimto 'tongs (cooking utensil)' |
| So5.420 | the breakfast | tajudo |
| So5.430 | the lunch | fil |
| So5.440 | the dinner | ra:tij $k^{h} o u$ |
| So5.460 | to peel | tshinja:mu |
| So5.470 | to sieve or to strain | tfalja:mu 'to strain; to sieve (e.g. flour)'; tharmu 'to strain; to sieve (milk, tea, puri from oil, churn butter)' |
| So5.480 | to scrape |  |
| So5.490 | to stir or to mix | kวsmu |
| So5.510 | the bread | hod 'barley bread'; tsapti 'chapati'; rot 'chapati'; pol 'puri'; thispol 'fried bread made of watery dough' |
| So5.530 | the dough | tsisay pintu |
| So5.540 | to knead | tremu |
| So5.550 | the flour | tsisay; meda; pithas; ga:fa:y 'buckwheat flour'; konika:y 'wheat flour'; tshalija pithas 'corn flour'; jud 'roasted barley flour' |
| So5.560 | to crush or to grind | rabmu 'to crush edibles in mortar'; junnu 'to grind cereal to flour'; $p^{\text {hramu }}$ 'to crush (potatoes)' |
| So5.570 | the mill | karkhana: |
| So5.580 | the mortar(1) | kanij; hasgotay |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So5.590 | the pestle | muslay |
| So5.610 | the meat | fa 'meat; flesh' |
| So5.630 | the sausage | $g^{h}$ ima: |
| So5.640 | the soup | $t^{\text {ho }}$ ob 'meat soup' |
| So5.650 | the vegetables | kan; ba:dzi 'cooked vegetable' |
| So5.660 | the bean | fimin |
| So5.700 | the potato | halgay |
| So5.710 | the fruit | $p^{\text {holay }}$; $p^{\text {hrut }}$ |
| So5.712 | the bunch | $t^{\text {hontay }}$ |
| So5.760 | the grape | aygu:r (cultivated); da:k ${ }^{h} a y$ (wild indigenous) |
| So5.790 | the oil | telay |
| So5.791 | the grease or fat | $t^{\text {h }}$ os |
| So5.810 | the salt | $t^{h} a$ |
| So5.821 | the chili pepper | pipli |
| So5.840 | the honey | vas |
| So5.850 | the sugar | tsini; $k^{\text {hand }}$ |
| So5.860 | the milk | $k^{h}$ iray |
| So5.870 | to milk | ( $k^{\text {hiray }}$ ) tsurmu |
| So5.880 | the cheese | kokpol (a traditional food item which has a similar preparation method as cheese); panir |
| So5.890 | the butter | mak ${ }^{h} a n ;$ gi 'ghee (clarified butter)'; mar 'butter; ghee' |
| So5.910 | the mead | vas $p^{\text {ha:sur }}$ 'fermented honey drink' |
| So5.940 | the fermented drink | rak 'a local alcoholic beverage'; $p^{h}$ a:sur, ti $p^{h}$ a:sur 'a local alcoholic beverage'; dayle 'a local alcoholic beverage'; bijar 'beer (modern)' |
| So5.970 | the egg | anda; lit; faray |
| So5.971 | the yolk | golduy |
| So5.99906 | the biscuit | biskut |
| So5.99908 | the cabbage | (band)gobi |
| So5.99910 | the cream | pon |
| So5.99922 | the vinegar | sirka |
| So6.110 | to put on | ligmu (TR) 'to put on (clothes, jewelry)'; likfimu (MDL) 'to put on (clothes, jewelry)'; lantimu (MDL) 'to put on (clothes, jewelry)'; ga:ḑimu, ga:timu (MDL) 'to put on clothes, also in group' |


| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So6.120 | the clothing or clothes | gasa: (PL) |
| So6.130 | the tailor | sujĩ ' 'ailor making traditional coat and cap (also a subcategory of the IA Chamang group)' |
| So6.210 | the cloth | gas; kap $^{\text {r }}$ a: ' 'cloth, fabric'; tfucz 'kitchen cloth' |
| So6.220 | the wool | tsam |
| So6.240 | the cotton | su:t |
| So6.250 | the silk | silk |
| So6.270 | the felt | $p^{\text {hog }}$ dori 'wool felt' |
| So6.28o | the fur | pu: 'body hair; fur' |
| So6.290 | the leather | tsamra; ponay 'skin; hide; leather (of cows, oxen, buffaloes etc.)' |
| So6.310 | to spin | pannu 'to spin wool' |
| So6.320 | the spindle | part |
| So6.330 | to weave | tagmu 'to weave; to knit' |
| So6.340 | the loom | dzag |
| So6.350 | to sew | ропnи 'to sew (with a sewing machine)' |
| So6.360 | the needle(1) | kept; keb 'needle; awl'; sua 'large needle; injection needle' |
| So6.370 | the awl | karkeb; keb 'needle; awl' |
| So6.380 | the thread | rid |
| So6.390 | to dye | raŋgja:mu |
| So6.410 | the cloak | $t^{h}(r) u b a$ |
| So6.420 | the (woman's) dress | gasa;; ts ${ }^{\text {e }}$ esmju gas |
| So6.430 | the coat | ko:t; tsamuko:t 'men's traditional long (woolen) coat'; $t^{h} u b a$ 'long woollen cloak/coat worn by bridegroom'; to:li 'traditional (green) women's jacket' |
| So6.440 | the shirt | kurta (traditional); kamidz (modern) |
| So6.450 | the collar | bran |
| So6.48o | the trousers | suthon 'traditional men's woolen trousers'; pent (modern) |
| So6.490 | the sock or stocking | gusab; baysab 'woolen socks or shoes which cover feet, but not ankles, worn indoors' |
| So6.510 | the shoe | pon |
| So6.520 | the boot | gambu:t |


| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So6.540 | the shoemaker | mutsi: 'cobbler'; tfama:res; tfamay 'male member of a particular community' |
| So6.550 | the hat or cap | top 'hat, cap, helmet'; $t^{h}$ epay 'traditional cap'; <br> petthepay 'black cap worn by bride'; pa:guri 'turban'; <br> pa:g 'turban worn by bridegroom' |
| So6.570 | the belt | gat ${ }^{\text {hiy, }}$ gat ${ }^{\text {h }}$ ay 'traditional woven belt worn by women'; dori 'belt; rope’ |
| So6.580 | the glove | gud baygusab; gusab |
| So6.610 | the pocket | $k^{h}$ isog |
| So6.620 | the button | boton |
| So6.630 | the pin | kobdza (traditional pin worn by women) |
| So6.710 | the ornament or adornment | ta:nay |
| So6.720 | the jewel | djvarat |
| So6.730 | the ring | mundi |
| So6.740 | the bracelet | patay 'traditional broad gold bracelet'; torru 'traditional broad silver bracelet' |
| So6.750 | the necklace | tramol 'traditional necklace'; tsandraha:r 'traditional necklace'; ma:lay, ma:liy 'necklace, garland of dried fruit'; u:ma:lay 'necklace, garland of flowers' |
| So6.760 | the bead | profoll 'a kind of bead (red and large)' |
| So6.770 | the earring | kaint ${ }^{\text {he }}$ 'traditional earring' |
| So6.810 | the handkerchief or rag | safi |
| So6.820 | the towel | tolija |
| So6.910 | the comb | kothay; kuf; for 'wool carding tool' |
| So6.920 | the brush | bruf |
| So6.921 | the plait/ braid | kjar:ild kra: 'plaited/braided hair' |
| So6.930 | the razor | $k^{h}$ urts 'large knife; large razor' |
| So6.940 | the ointment | Selfimag kri:m |
| So6.950 | the soap | samon |
| So6.96o | the mirror | arfuk; sisor, fifa: 'mirror; glass' |
| So6.99901 | the bag | $t^{h}$ elai; dzola:; beg; $k^{h} u l$ 'leather bag for storing food items'; botua 'purse' |
| So6.99907 | the sandal | sendal |
| So6.99911 | to wear | gaadjimu 'to put on (clothes)' |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So7.110 | to live | nimu; nafimu 'to sit; to stay; to rest' |
| So7.120 | the house | kim 'house, home'; arsisi kim 'modern house, built with bricks and cement'; gora 'stone house' |
| So7.130 | the hut | dog 'small house'; fennay 'small house in mountain or fields' |
| So7.131 | the garden-house | $u r y^{h}$ 'separate storehouse traditionally used to store grains, alchohol, butter etc' |
| So7.140 | the tent | tent 'tent for ceremonies'; tombua 'tarpaulin' |
| So7.150 | the yard or court | $k^{h} a t a y$ |
| So7.160 | the men's house | mjuך kim; mikim |
| So7.170 | the cookhouse | panthay 'room with stove in traditional house'; kutin 'outside kitchen for preparing large amount of food for celebrations etc' |
| So7.180 | the meeting house | dumsa kim; torrin 'raised platform in the center of the temple complex for placing devta on, where people gather' |
| So7.210 | the room | pant ${ }^{h}$ ay 'room with stove in traditional house; floor (in a traditional house); the main residential room in a house' |
| So7.220 | the door or gate | dvaray; pitay 'gate, door'; kajay ‘door with doorframe' |
| So7.230 | the lock | fa:nay, fa:niy 'traditional large iron lock on the main door' |
| So7.231 | the latch or doorbolt | vant ${ }^{\text {a }}$ a |
| So7.240 | the key | talay(ts), ta:lits |
| So7.250 | the window | bodiy |
| So7.260 | the floor | $p^{h}$ or 'floor; ground'; pant ${ }^{h}$ ay 'floor (inside a traditional house); room' |
| So7.270 | the wall | bitin |
| So7.310 | the fireplace | meliy; $p^{h}$ a:liy 'oven, fireplace' |
| So7.320 | the stove | ge:s 'modern (gas) stove' |
| So7.330 | the chimney | dusray |
| So7.370 | the ladder | $t^{\text {hem }}$ (ts); ts ${ }^{\text {ham }}$ 'ladder; bridge' |
| So7.420 | the bed | palayg 'modern bed'; tsa:rpaij 'cot with wooden frame; matress part of a bed made of woven ropes'; |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
|  |  | pof 'bedding (traditionally people sleep on bedding on the floor)' |
| So7.421 | the pillow | kum |
| So7.422 | the blanket | kambal; rudjai; $k^{h} j a r$ 'blanket made of goat's hair' |
| So7.430 | the chair | $k\left({ }^{h}\right) u r s i$ |
| So7.440 | the table | medz |
| So7.450 | the lamp or torch | betri 'flashlight'; Lalten 'kerosene lamp'; lomp 'small kerosene lamp'; divay 'earthen lamp' |
| So7.46o | the candle | mumbati |
| So7.480 | the trough | $k^{h}$ o:lo; tsorin |
| So7.510 | the roof | ts'apray 'A-shaped roof of a traditional house or a temple'; foll 'flat stone roof'; lenter 'modern bricktile roof'; malt ${ }^{h} a y$ 'thatched roof' |
| So7.550 | the beam | baijay; dzalda:ray 'roof beam' |
| So7.56o | the post or pole | $t^{\text {hamgay }}$ 'pole (in traditional Kinnauri homes there used to be a pole adorned with decorative intricate carving in the middle of a house)' |
| So7.570 | the board | rots |
| So7.610 | the mason | mistri |
| So7.620 | the brick | üt |
| So7.630 | the mortar(2) | siment |
| So7.6500 | the camp | tsathay |
| So7.6700 | to $\tan$ | $t^{\text {homu }}$ |
| So7.99905 | the mosquito net | matjharda:ni |
| So8.110 | the farmer | dzimdar |
| So8.120 | the field | rim; ropay 'large farming field'; serriy 'large farming field'; nol 'farm below village'; kanda 'farm just below mountain top'; dabaray 'farm with many rocks/stones'; patay 'terraced farm' |
| So8.1210 | the paddy | da:n |
| So8.130 | the garden | bagitsa 'garden; orchard' |
| So8.150 | to cultivate | $p a \int m u$ 'to sow; to cultivate' |
| So8.160 | the fence | batay |
| So8.170 | the ditch | $k^{h}$ aruy |
| So8.210 | to plough/plow | halay hemu; stal hemu |
| So8.212 | the furrow | sisthay |
| So8.220 | to dig | kormu |


| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So8.230 | the spade | $p^{\text {horua }}$ 'spade; hoe' |
| So8.240 | the shovel | biltsa 'shovel with a wooden handle and aluminium base, used in farming'; korpanay 'wooden shovel for snow shuffling' |
| So8.250 | the hoe | Jor; kudali; $p^{h}$ orua 'spade; hoe' |
| So8.270 | the rake | forts |
| So8.2800 | the digging stick (=yamstick) | dzabal |
| So8.310 | to sow | $p a f m u$ 'to sow; to cultivate' |
| So8.311 | the seed | poto; bijay; botay 'soybean-like seed'; re:mo: 'apricot seeds'; mog 'bird seed'; pug 'roasted seeds' |
| So8.320 | to mow | labmu |
| So8.330 | the sickle or scythe | dzithray |
| So8.340 | to thresh | $p^{h}$ ammu 'to thresh manually using a stick'; <br> tshatja:mu 'to thresh manually while holding the sheaf in hand and beating it against a hard surface' |
| So8.350 | the threshing-floor | $k^{h}$ olay |
| So8.410 | the harvest | $p^{\text {hosol }}$ |
| So8.420 | the grain | $t^{\text {h }}$ oa |
| So8.430 | the wheat | dzod |
| So8.440 | the barley | tag |
| So8.470 | the maize/corn | ts ${ }^{\text {bali, } t^{\text {ha }} \text { lija }}$ |
| So8.480 | the rice | ral 'modern rice (cooked or uncooked)'; koni 'a local rice variety (cooked or uncooked)' |
| So8.510 | the grass | $t /$ |
| So8.520 | the hay | $k^{\text {holay; }}$ for; brati |
| So8.530 | the plant | da:lay; ba:lay 'seedling' |
| So8.531 | to plant | pafmu; tuømu 'to plant; to make stand' |
| So8.540 | the root | dsi:lay |
| So8.550 | the branch | dalay, daliy; bar |
| So8.560 | the leaf | pathray |
| So8.570 | the flower | $p^{\text {hul; }}$ u: |
| So8.6oo | the tree | bo:thay |
| So8.630 | the birch | fag |
| So8.640 | the pine | lism; kjalmay 'Deodar cedar' |
| So8.650 | the fir | pan |
| So8.68o | the tobacco | toma:ku |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So8.690 | to smoke | tuymu 'to drink; to smoke'; sigrit tuømu 'to smoke a cigarette' |
| So8.691 | the pipe | nodi; fot ${ }^{\text {hes; }}$ hukka |
| So8.720 | the tree stump | goniy 'tree stump; tree trunk'; doya 'tree stump; tree trunk' |
| So8.730 | the tree trunk | goniŋ 'tree stump; tree trunk'; doja 'tree stump; tree trunk'; bo:thayu duza |
| So8.740 | the forked branch | bragdza 'forked tree branch; crossroads' |
| So8.750 | the bark | bod '(human) skin; bark; peel'; pad 'bark of the Himalayan birch' |
| So8.760 | the sap | $t^{\text {h }}$ iti |
| So8.820 | the coconut | gori |
| So8.840 | the banana | kela |
| So8.931 | the pumpkin or squash | $r e t^{h}{ }_{0}$ 'pumpkin with hard peel, inedible'; kondu 'pumpkin with soft peel, edible'; kaddu 'pumpkin' |
| So8.940 | the bamboo | $b a ̃ s$ |
| So8.941 | the sugar cane | gənna |
| So8.96o | the fish poison | math ${ }^{\text {esu }}$ bifay |
| So8.980 | the mushroom | dsaymuts |
| So8.9930 | the needle(2) | ton |
| So8.996o | the cone | toylo; ${ }^{\text {hrus; }}{ }^{\text {ha:jga:le }}$ |
| So8.99901 | the almond | badam |
| So8.99905 | the apple | sjo, seo (modern); pal (indigenous, traditional) |
| So8.99910 | the carrot | gardzar |
| So8.99911 | the cashew | kadju |
| So8.99918 | the dung | molay |
| So8.99930 | the mango | a:m |
| So8.99935 | the onion | pja:dz |
| So8.99936 | the orange | sontra |
| So8.99937 | the pea | matar |
| So8.99938 | the pear | naspoti |
| So8.99941 | the plum | lutsa 'wild plum' |
| So8.99952 | the turnip | fakar |
| So8.99961 | to pick | $t^{\text {homu }}$ |
| So8.99962 | to raise or grow | jogmu (TR) (animals, humans); pa:lja:mu (TR) (animate); podzja:mu (тг) (inanimate) |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| Sog. 110 | to do | lannu 'to do; to make' |
| Sog.1110 | to make | lannu 'to do; to make'; tuja:mu 'to prepare; to make ready (with 3 person object)'; tuja: $\int i m u$ (MDL) 'to get oneself prepared' |
| Sog. 120 | the work | kamay; nukuri 'service; job’ |
| Sog. 140 | to bend | $k^{h}$ оŋmu (TR); $k^{h}$ oŋfimu (MDL) 'to bend; to bow slightly (e.g., for greeting)' |
| Sog. 150 | to fold | kulugmu |
| Sog.160 | to tie | ts ${ }^{\text {h }}$ 訨nu |
| Sog. 161 | to untie | $t^{\text {hormu }}$ |
| Sog. 180 | the chain | faylin |
| Sog. 190 | the rope | baf; dori; $\mathrm{Jak}^{\text {h }}$ ro; tho $^{\text {ornliy }}$ 'clothesline' |
| Sog. 192 | the knot | gant ${ }^{\text {hay }}$ |
| Sog.210 | to strike or hit or beat | kulmu; photno: rannu; tugmu |
| Sog.220 | to cut | katja:mu; malmu; $p^{h}$ ralmu 'to cut down'; $p^{h}$ olmu 'to cut/chop wood' |
| Sog. 222 | to chop | kutkutay fennu; $p^{\text {holmu }}$ 'to cut/chop wood' |
| Sog. 223 | to stab | $t^{\text {h }}$ uris rannu |
| Sog. 230 | the knife(2) | tsaku |
| Sog. 240 | the scissors or shears | katu 'modern scissors'; thampa 'traditional scissors' |
| Sog. 250 | the axe/ax | lasta; ostorsostor 'battle axe' |
| Sog. 251 | the adze | basin |
| Sog. 260 | to break | tagmu (TR); dzagmu (INTR); tagfimu (MDL); bafmu (INTR) |
| Sog. 261 | broken | dzagdzag |
| Sog. 270 | to split | $p^{h}$ armu 'to split; to tear' |
| Sog.280 | to tear | $p^{h}$ armu 'to split; to tear'; tsermu 'to tear; to cut with knife/scissors' |
| Sog. 290 | to skin | $k^{h}$ O:mu 'to remove skin, bark, etc.' |
| Sog.310 | to rub | batrja:mu (S), butrja:mu (B) (TR); batrja: $/ i m u(S)$, butrja: $/ i m u$ (B) (MDL) |
| So9.3110 | to wipe | kufja:mu (TR); kufja: imu (MDL) |
| So9.320 | to stretch | tsonnu (TR); tsonfimu (MDL) 'to stretch (oneself); to yawn by stretching (one's arms)' |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| So9.330 | to pull | dabmu (TR); dabfimu (MDL) |
| So9.340 | to spread out | pramu (TR) (cereals etc); bramu (INTR); prafimu (MDL); sunnu (TR) (batter) |
| So9.341 | to hang up | dsontay fennu |
| So9.342 | to press | dobja:mu; let ${ }^{h} j a: m u$ 'to press edibles or cow dung'; sethja:mu 'to press to straighten something' |
| So9.343 | to squeeze | trumu (TR); truthja:mu (TR) |
| So9.350 | to pour | osmu |
| So9.36o | to wash | timu (TR) (non-living objects); fifimu (MDL); <br> dsifimu (MDL) 'to wash one's hands' |
| So9.370 | to sweep | kutfay lannu 'to sweep with a broom'; foja:mu 'to sweep/clean (in general)' |
| So9.380 | the broom | kutfay; kutfots 'small broom for clearing ash around traditional stove in the middle of living room' |
| So9.422 | the tool | jodzay |
| So9.430 | the carpenter | ores 'male member of the ores community (a social sub-group which traditionally were carpenters)'; oronig 'female member of the ores community' |
| So9.440 | to build | раути |
| So9.460 | to bore | dvannu; dogiŋ lannu; dogiŋ tonnu 'to bore, to take out something' |
| So9.461 | to hollow out | dogiv kotja:mu 'to cut a hole'; dogin tonnu 'to bore; to take out something' |
| So9.480 | the saw | ara |
| So9.490 | the hammer | hat ${ }^{\text {ora }}$ |
| So9.500 | the nail | kilay |
| So9.56o | the glue | $t^{\text {h }}$ iti |
| Sog.6oo | the blacksmith | domay 'traditional blacksmith community'; domes 'male member of this community' |
| Sog.610 | to forge | ga:y fennu |
| Sog.640 | the gold | dzay |
| So9.650 | the silver | mul |
| Sog.66o | the copper | tromay |
| Sog. 670 | the iron | ron |
| Sog.68o | the lead | sitk ${ }^{h}$ |
| Sog.690 | the tin or tinplate | tsadar |


| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| Sog. 710 | the potter | $k^{h}$ amar |
| Sog.720 | to mould/mold | $k^{h}$ оуmu (TR); $k^{h}$ о才fimu (MDL) |
| So9.730 | the clay | $m a(:) t i y ~ ' l a n d ; ~ s o i l ; ~ c l a y ' ~$ |
| Sog.740 | the glass | fifa; siso 'glass; drinking glass; mirror' |
| So9.750 | to weave or plait/braid | tagmu 'to weave'; kjarmu 'to braid (someone's hair)'; kjarfimu (MDL) 'to braid (one's own hair)' |
| Sog.760 | the basket | tokri; kotiy 'basket carried on the back'; fayger 'woven basket without handle or lid'; tshatots 'basket with handle'; danli 'large bamboo basket used for storing large quantities of cooked food at gatherings (not used these days)' |
| So9.770 | the mat | $k^{h} j a r$ 'blanket made of goat's hair; mat (rough, to sit on)' |
| So9.790 | the fan | payk ${ }^{h} a$ |
| Sog.810 | to carve | marap tonnu |
| Sog.820 | the sculptor | kunda dsaytsja: 'sculptor of clay statues' |
| Sog.830 | the statue | kunda '(full-body) statue (of a god)'; murti |
| Sog. 840 | the chisel | ts ${ }^{\text {en nip }}$ |
| Sog.880 | the paint | rayg 'paint, color' |
| Sog.890 | to paint | raŋgja:mu; rangfennu; si: tonnu 'to paint (a special kind of Buddhist painting on silk or cotton, created by lamas)'; temu 'to write; to draw; to paint' |
| So9.9000 | to draw water | titimu |
| Sog.9100 | the peg | $k^{h} u n t i$ |
| So9.99915 | the pencil | pensil |
| So9.99916 | the rust | $k^{h}$ oin |
| So9.99917 | the sack | boray, bori |
| So9.99931 | to dwell or stay | nimu |
| So9.99934 | to prepare | tuja:mu (TR); tuja: $/$ imu (MDL) |
| So9.99936 | to smear | felmu (TR); felfimu (MDL) |
| So9.99938 | to support | gudrannu (TR); gudranfimu (MDL) |
| S10.110 | to move | sikja:mu (TR); sikja: $/ i m u(M D L) ~ ' t o ~ g e t ~ m o v e d, ~$ shaken' |
| S10.120 | to turn | furja:mu; k ${ }^{h}$ оуmи 'to turn; to bend; to mold'; polfja:fimu (MDL) 'to turn around; to roll (PL) (collectively)'; poltja:mu 'to flip over (e.g., chapati, quilt)' |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S10.130 | to turn around | poltennu (INTR) 'to turn around, to return, to come back'; furja: imu (MDL) 'to circle back'; $k^{h}$ oŋfimu (MDL) 'to get turned, bent, molded' |
| S10.140 | to wrap | mefnja:mu (TR); brinlja:mu (TR); brinlja:/imu (MDL) |
| S10.160 | to drop | $t^{\text {hannu; }}$ togmu; $p^{h}$ ralmu 'to fell; to drop; to topple'; $\operatorname{garmu}$ (TR) '(unintentionally) to drop; to topple' |
| S10.170 | to twist | mekjamu (sth inanimate) (TR); mekjafimu (MDL) |
| S10.210 | to rise | $t^{\text {hofimu (MDL); donnu, dvannu 'to come out (INTR), }}$ to rise (sun)'; dzarmu (sun, moon); sarfimu (MDL) (human); jantimu 'to wake up (MDL)' |
| S10.220 | to raise or lift | $t^{\text {homu; sarmu 'to raise, to wake up (TR)' }}$ |
| S10.230 | to fall | bralmu; dannи 'to get dropped, by natural force'; $t^{\text {hafimu (MDL) 'to get dropped (on its own or unin- }}$ tentionally)' |
| S10.240 | to drip | toogmu (TR); djogmu (INTR) |
| S10.250 | to throw | paja:mu; $p^{\text {hikja:mu ' }}$ to throw out; to discard'; bar/ja:mu 'to throw; to leave behind (a devta) and return to the village'; Sot ${ }^{h j a: m u}$ 'to throw; to leave (forever)' |
| S10.252 | to catch | tsummu 'to grasp, to catch' |
| S10.260 | to shake | dzülja:mu (TR) (animate); thoklja:mu (TR) (liquid); $t^{h}$ oŋfimu (MDL) 'to shake dust off clothes' |
| S10.320 | to flow | bojennu (INTR) 'to blow; to flow'; boja:fimu (MDL) 'to blow; to float (PL) (collectively)' |
| S10.330 | to sink | dubja:mu (TR); dubennu (INTR) |
| S10.340 | to float | bojennu (INTR) |
| S10.350 | to swim | trabfimu (MDL) 'to swim or to cross the river on a rope' |
| S10.352 | to splash | tshatja:mu |
| S10.360 | to sail | tsalja:mu 'to drive a vehicle, boat, etc.' |
| S10.370 | to fly | $j a b m u(\mathrm{TR})$ |
| S10.380 | to blow | $p^{\text {a ulja:mu (TR) }}$ |
| S10.410 | to crawl | dabfimu (MDL) |
| S10.412 | to kneel | dolinmu 'to kneel (in front of a god); to touch elders' feet as a sign of respect' |
| S10.413 | to crouch | gvafimu (MDL); la: ts terja:mu (TR) |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S10.420 | to slide or slip | bretimu |
| S10.430 | to jump | gvafimu (MDL); gvamu (TR); la:y tsherja:mu (TR); <br> (s)kvamu 'to make jump' (causative) |
| S10.431 | to kick | lathos rannu |
| S10.440 | to dance | ta:mu |
| S10.450 | to walk | junnu (INTR); halennu (INTR) 'to take a walk, to roam'; junnu fennu (TR); halja:mu (TR) 'to walk, to roam' |
| S10.451 | to limp | $k^{h}$ orennu 'to limp; to snore' |
| S10.460 | to run | $t^{\text {hurennu (INTR); }}{ }^{\text {hurja:mu (TR) }}$ |
| S10.470 | to go | bjomu (S), bimu (B) |
| S10.471 | to go up | $t^{\text {hug bjomu }}$ |
| S10.472 | to climb | (thug) bjomu |
| S10.473 | to go down | (jug) djabmu |
| S10.474 | to go out | basriy donnu |
| S10.480 | to come | bәпnи |
| S10.481 | to come back | poltennu (INTR); poltja:mu (TR) |
| S10.490 | to leave | fot $h j a: m u$ 'to throw; to leave (for ever)'; barfja:mu 'to throw; to leave behind (a devta) and return to the village' |
| S10.491 | to disappear | So bjomu |
| S10.510 | to flee | bjomu 'to leave; to go away; to run away'; Jothja:mu 'to throw; to leave (for ever)' |
| S10.520 | to follow | jumtjjunnu |
| S10.530 | to pursue | pit ${ }^{\text {ha }}$ a lannu; $k^{h}$ erja:mu 'to chase (TR)'; $k^{h} a b m u$ 'to chase' |
| S10.550 | to arrive | рәппи 'to arrive; to approach' |
| S10.560 | to approach | рәппи 'to arrive; to approach' |
| S10.570 | to enter | komo bjomu; saŋfimu (MDL) (forcefully, e.g., thief) |
| S10.5800 | to go or return home | poltete bjomu |
| S10.610 | to carry | $t^{\text {homu; }}$ ' kjubmu 'to carry on one's back' |
| S10.612 | to carry in hand | gudo thomu |
| S10.613 | to carry on shoulder | raye thomu; bide thomu |
| S10.614 | to carry on head | bale $t^{\text {homu }}$ |
| S10.615 | to carry under the arm | kjarthay thomu |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S10.620 | to bring | karmu |
| S10.630 | to send | Јеппи |
| S10.640 | to lead | dzаути |
| S10.650 | to drive | tsalja:mu |
| S10.660 | to ride | fokfimu (MDL) |
| S10.670 | to push | (s)tugmu 'to push; to strike; to hit'; $p^{h}$ utugmu 'push (to hurt the other person)' |
| S10.710 | the road | solok |
| S10.720 | the path | om 'mountain path' |
| S10.740 | the bridge | $t t^{\text {ham }}$ |
| S10.750 | the cart or wagon | goragari |
| S10.760 | the wheel | paija |
| S10.780 | the yoke | golduy |
| S10.810 | the ship | panidjadz |
| S10.830 | the boat | kijti |
| S10.850 | the oar | tарри |
| S10.890 | the anchor | laygar |
| S10.910 | the port | bandarga |
| S10.920 | to land | rebtiomu |
| S10.99901 | to accompany | eke bjomu |
| S10.99903 | to carry on the back | pifte thomu |
| S10.99904 | to dip | t(r)agmu |
| S11.110 | to have | hatimu 'to have; to become' |
| S11.130 | to take | unnu 'to take; to seize' |
| S11.140 | to grasp | tsummu |
| S11.160 | to get | $t^{\text {hob }}$ ¢mu (TR); porennu (INTR) 'to get; to find' |
| S11.170 | to keep | ta:mu 'to keep; to put' |
| S11.180 | the thing | bastuך; tsi:dz |
| S11.210 | to give | rannu (NON-1/20), кети (1/20) |
| S11.220 | to give back | poltja:tja: rannu |
| S11.240 | to preserve | mapipita:mu |
| S11.250 | to rescue | botsja:mu |
| S11.270 | to destroy | tshaka lannu |
| S11.280 | to injure | $a k^{h} a$ bjomu |
| S11.2900 | to damage | nuksa:n lannu |
| S11.310 | to look for | potiomu |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S11.320 | to find | porennu (INTR); paja:mu (TR) |
| S11.330 | to lose | pi: $\int i m u(\mathrm{MDL})$ |
| S11.340 | to let go | tsherja:mu |
| S11.430 | the money | Jugu |
| S11.440 | the coin | pesats |
| S11.510 | rich | soukar |
| S11.520 | poor | da:ldis; bitfa:res, bitfa:rikas 'helpless, poor'; ala:tsar 'poor (man)' |
| S11.530 | the beggar | untsja: |
| S11.540 | stingy | brait |
| S11.620 | to borrow | rin rannu |
| S11.630 | to owe | rin hatfimu |
| S11.640 | the debt | rin |
| S11.650 | to pay | fugu rannu |
| S11.690 | the tax | teks; kar, kar |
| S11.780 | the wages | pagar |
| S11.790 | to earn | kəmaj lannu; kəmaja:mu |
| S11.810 | to buy | dzogmu |
| S11.820 | to sell | геппи |
| S11.830 | to trade or barter | bjepar lannu |
| S11.840 | the merchant | dukandarr; bepari |
| S11.850 | the market | badza:r |
| S11.860 | the shop/store | ha:ti; duka:n |
| S11.870 | the price | molay; kimot |
| S11.880 | expensive | me(h)eyga, mẽga; tjoy molay |
| S11.890 | cheap | sostas, sosta |
| S11.910 | to share | kagmu 'to distribute'; kagtimu (MDL) 'to distribute' |
| S11.920 | to weigh | tolja:mu |
| S11.99904 | the property | ma:ja; gorbon; ma:l |
| S 11.99907 | to receive | porennu (INTR) 'to receive; to find' |
| S 12.0100 | after | num; $n$ ipi |
| S 12.0110 | behind | numsko;nums; piftip |
| S 12.0120 | in | dor 'in; near'; komo 'inside' |
| S12.0130 | at | $t^{\text {h }}$ ug 'at; up; above'; den 'on; above; over' |
| S12.0200 | beside | $d \partial y$ 'near; beside; next' |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S12.0300 | down | jotfriy 'below', jet'hay 'under; inside; down'; jug 'down; below' |
| S12.0400 | before | oms |
| S12.0410 | in front of | omsko |
| S12.0500 | inside | komo |
| S12.0600 | outside | basay; barriy (B); be:riy (S) |
| S12.0700 | under | $j e t^{h} a \eta$ 'under; inside; down' |
| S12.0800 | up | $t^{\text {h }}$ ug 'at; up; above'; den 'on; above; over' |
| S12.0810 | above | den 'on; above; over' |
| S12.110 | the place | dza:ga |
| S12.120 | to put | ta:mu 'to keep; to put' |
| S12.130 | to sit | tofimu (MDL) 'sit'; nafimu 'to sit; to stay; to rest' |
| S12.140 | to lie down | dinnu |
| S12.150 | to stand | den nimu |
| S12.160 | to remain | daktimu |
| S12.170 | the remains | daktijid |
| S12.210 | to gather | metja:mu (TR); metja: $\int i m u(\mathrm{MDL}) ;$ dzabmu (TR) (small-size objects) |
| S12.212 | to pick up | $t^{\text {homu }}$ |
| S12.213 | to pile up | derifennu |
| S12.220 | to join | tigmu |
| S12.230 | to separate | $k^{h}$ etsi lannu (TR); tomu 'to take apart a man-made object' |
| S12.232 | to divide | $k^{h}$ a:mu (TR) 'to distribute'; kagmu (TR) 'to distribute' |
| S12.240 | to open | tоути (TR) |
| S12.250 | to shut | pinnu (TR); pifimu (MDL); binnu (INTR) |
| S12.260 | to cover | $p^{h}$ ogmu (TR) (animate objects); lubmu (TR) (inanimate objects, e.g., large pots, but not grass); gorja:mu (TR) (inanimate objects such as grass)' |
| S12.270 | to hide | таути |
| S12.310 | high | rayk 'high, tall (human, animate, inanimate)' |
| S12.320 | low | melk |
| S12.330 | the top | ball 'head; top' |
| S12.340 | the bottom | tol; tha:say |
| S12.350 | the end(1) | dzo jumsko 'last; end (spatial)' |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S12.353 | the edge | darr |
| S12.360 | the side | $p a f$ |
| S12.370 | the middle | madzay |
| S12.410 | right(1) | dzak ${ }^{\text {a }}$, 'right; south' |
| S12.420 | left | $k^{h}$ odzay 'left; north' |
| S12.430 | near | dor; day 'nearby (visible); beside'; neray 'near, close' |
| S12.440 | far | varko |
| S12.450 | the east | dzarko |
| S12.460 | the west | redko |
| S12.470 | the north | $k^{\text {hodzay }}$ 'left; north' |
| S12.480 | the south | dzak ${ }^{\text {a }}$, 'right; south' |
| S12.530 | to grow | pa:lennu (INTR) |
| S12.540 | to measure | раgти (edible objects); rinnu (non-edibles); <br> nарја:ти (non-edibles) |
| S12.550 | big | teg |
| S12.560 | small | gato(ts) (S); dzigits (B) 'small; young' |
| S12.580 | tall | la:mes 'long; tall'; rayk 'high; tall (human, animate, inanimate)' |
| S12.590 | short | $t^{\text {h }}$ otats (human) |
| S12.610 | wide | $k^{h} u l a s$ 'wide; open (e.g., landscape or a large house with more open space)'; kuntf 'wide (inanimate objects, e.g., clothes, facial features, road)' |
| S12.620 | narrow | gates |
| S12.630 | thick | mot ${ }^{h}$ es 'thick; fat (e.g., dog, tree, man)'; bak ${ }^{h} l e s$ (nonhuman) |
| S12.650 | thin | bagit;; nakits (e.g., tree, man, child but not domestic animals) |
| S12.670 | deep | duges (e.g., river, well); duga (e.g., plate) |
| S12.710 | flat | somay; podres; maftits 'smooth; flat (cloth)'; pentenle (e.g., plate) |
| S12.730 | straight | soldes 'straight; simple-natured (person)'; soldi 'straight; humble; non-crooked (person)' |
| S12.740 | crooked | koyta (M), koŋti ( F ) 'crooked; humpbacked' |
| S12.760 | the corner | dzar |
| S12.780 | the square | padzar (ja:) |
| S12.810 | round | ba:tles (inanimate objects); gola 'round; circle' |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S12.820 | the circle | gola 'round; circle'; goliy 'hoe balls' |
| S12.830 | the ball | gĩdu; pintu |
| S12.840 | the line | len; rek ${ }^{h}$ (only in Hindu mythological narratives) |
| S12.850 | the hole | dogiv; dzabra: |
| S12.920 | similar | ibrobar (in personality); iruay (in appearance) |
| S12.930 | to change | kvalmu |
| S13.0100 | one | id;ek |
| S13.0200 | two | nif |
| S13.0300 | three | fum, sum |
| S13.0400 | four | pə |
| S13.0500 | five | ja |
| S13.0600 | six | tug |
| S13.0700 | seven | (s)ti¢ |
| S13.0800 | eight | re |
| S13.0900 | nine | (s)gui; id mats se |
| S13.100 | ten | se: |
| S13.101 | eleven | sigid |
| S13.102 | twelve | sonif |
| S13.103 | fifteen | sona |
| S13.104 | twenty | nidza |
| S13.105 | a hundred | ra: |
| S13.106 | a thousand | hadza:r |
| S13.107 | to count | narmu |
| S13.140 | all | tseik 'all; whole'; salam 'all; whole (objects)'; pura 'whole (e.g., city, village, country)'; gui ‘all; whole (duration)'; sares 'all; whole' |
| S13.150 | many | banbant; kus 'much, many (countable objects)'; val 'much, many (non-countable objects)'; botabot (this is used only in connection with beating or fighting with solid round objects) |
| S13.160 | more | tjon (non-countable objects); bodi (countable objects) |
| S13.170 | few | san; sants |
| S13.180 | enough | kjalek ${ }^{\text {a }}$, |
| S13.181 | some | $t^{\text {h }}$ d 'what; some'; domri; san; sants |
| S13.190 | the crowd | dzomgot |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S13.210 | full | baŋgi |
| S13.220 | empty | Jagi |
| S13.230 | the part | hisa |
| S13.2310 | the piece | $k^{\text {hanayts }}$ |
| S13.240 | the half | $k^{h} a: n a \eta$ (non-liquids); a:day (liquids) |
| S13.330 | only | eko |
| S13.3310 | alone | erts ${ }_{i}$ |
| S13.340 | first | dzo oms; pele |
| S13.350 | last | dzo nums |
| S13.360 | second | dzo omskotjnums |
| S13.370 | the pair | dsori |
| S13.380 | twice/two times | niS beray 'two times'; dugna 'twice' |
| S13.420 | third | fumu densja:; fum ba:g; fum hisa: 'one third' |
| S13.440 | three times | fum beray |
| S13.99901 | a little | $t^{\text {hora; saints }}$ |
| S13.99903 | each or every | rere |
| S13.99905 | the yard | gadz |
| S13.99906 | thirty | nidzo se |
| S13.99907 | to fill | бәךти (INTR); рәךти (TR) |
| S13.99908 | to substitute | bodlja:mu |
| S14.110 | the time | $t^{h}$ onay; la:mdes 'duration, time period'; ray 'times' (e.g., pa ray 'four times)' |
| S14.120 | the age | umor (human); adzok ${ }^{\text {a }}$; ts ${ }^{\text {h }}$ ( (in buddhism) |
| S14.130 | new | ju:g 'young; new' |
| S14.140 | young | ju:g 'young; new'; gatot 'young; small'; dzigits 'young; small'; dek ${ }^{\text {hor }}$ (human); dzuan (м) (human); konsay 'young(er) in kinship relation' |
| S14.150 | old | ufk (non-human); sjano (human); jaydze(ts) (animate F ) |
| S14.170 | late | $k^{h} r a k^{h} r a$ |
| S14.180 | now | hun |
| S14.190 | immediately | hunei |
| S14.210 | fast | hasal 'soon; fast (speed)'; dele 'quickly'; $p^{\text {hatak }}$ 'quickly' |
| S14.220 | slow | mesay; sulus |
| S14.230 | to hurry | Jumu (INTR) |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S14.240 | to be late | $k^{\text {hramu }}$ |
| S14.250 | to begin | dufimu (MDL) |
| S 14.2510 | the beginning | furu; dzode beray |
| S14.270 | to finish | (furmu) tshekja:mu (TR); purja:mu (TR) 'to finish; to complete'; fuŋmu (INTR) |
| S14.280 | to cease | rokja:mu (TR) 'to stop; to cease'; rukennu (INTR) 'to stop; to cease'; rokja: fmu (MDL) 'to stop; to cease' |
| S14.310 | always | dja:ro 'always; every day, daily' |
| S14.320 | often | ipaipa |
| S14.330 | sometimes | ipa; isan |
| S14.331 | soon | hasal 'soon; fast (speed)' |
| S14.332 | for a long time | kusistay |
| S14.340 | never | teraji |
| S14.350 | again | he; dema (S), tema (B) 'then; again' |
| S14.410 | the day(1) | mja; laje, le |
| S 14.4110 | the day(2) | dja:r; djusay; tharro |
| S14.420 | the night | ra:tio |
| S14.430 | the dawn | somsi |
| S14.440 | the morning | som |
| S14.450 | the midday | madzay laje, madzay le |
| S 14.451 | the afternoon | num laje, num le |
| S14.460 | the evening | fupa; fupelay |
| S14.470 | today | toro |
| S14.480 | tomorrow | na:b |
| S14.481 | the day after tomorrow | romi |
| S14.490 | yesterday | $m e:$ |
| S14.491 | the day before yesterday | $r i$ |
| S14.510 | the hour | ganta |
| S14.530 | the clock | grai,gari: |
| S14.610 | the week | hapta |
| S14.620 | Sunday | tvair, tvarray |
| S14.630 | Monday | suãray |
| S14.640 | Tuesday | mayglaray |
| S14.650 | Wednesday | budaray |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S14.660 | Thursday | brespot |
| S14.670 | Friday | fukaray |
| S14.680 | Saturday | fonferes |
| S14.710 | the month | gol |
| S14.730 | the year | bofay |
| S14.740 | the winter | gun |
| S14.750 | the spring(2) | renam |
| S14.760 | the summer | fol |
| S14.770 | the autumn/fall | tsharmi |
| S14.780 | the season | mosam; kalay |
| S14.99902 | long ago | omi |
| S14.99903 | New Year | sadzo ${ }^{104}$ |
| S15.210 | to smell(1) | ba:sennu (INTR) (one entity); ba:sja:fimu (MDL) (collectively); tamfimu (MDL); basennu (INTR) |
| S15.212 | to sniff | baisja:mu (TR); (bais) tammu (TR) |
| S15.250 | fragrant | bas |
| S15.260 | stinking | ganam |
| S15.350 | sweet | $t^{h}{ }^{\text {ig }}$; em |
| S 15.360 | salty | ts ${ }^{\text {a }}$ /kore; surk 'salty; sour' |
| S15.370 | bitter | ka:g |
| S15.380 | sour | surk 'salty; sour' |
| S15.390 | brackish | tshati |
| S15.410 | to hear | $t^{\text {hasmu }}$ |
| S15.420 | to listen | rontfimu |
| S15.440 | the sound or noise | (s) kad |
| S15.450 | loud | dzores |
| S 15.460 | quiet | tsutkay |
| S 15.510 | to see | $k^{h} j a m u(S), k^{\text {ima }}$ (B) |
| S15.520 | to look | taŋmu 'to observe' |
| S15.550 | to show | dzaymи |
| S 15.560 | to shine | dzalmalennu (INTR); dzakmakennu (INTR) |
| S15.570 | bright | dzalamala |
| S15.610 | the colour/color | rayg 'paint; color' |

[^30](cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S15.620 | light(2) | ts ${ }^{\text {a }}$; ; ts ${ }^{\text {atatk }}$ |
| S15.630 | dark | ajã:ray; tur |
| S15.640 | white | $t^{\text {hog }}$ |
| S15.650 | black | rok |
| S 15.660 | red | fvi:g |
| S 15.670 | blue | asmani; ra:g 'blue; green' |
| S15.680 | green | ra:g 'blue; green' |
| S 15.690 | yellow | pi:g 'yellow'; pigulgulo 'orange' |
| S 15.710 | to touch | $t^{\text {¢ }}$ 文ти |
| S15.712 | to pinch | tưqus rannu |
| S15.720 | to feel | demu 'touch; feel'; tsalmu |
| S 15.740 | hard | tal 'hard (objects)'; talkatal 'very hard (objects)' |
| S 15.750 | soft | koles; sapsapo; this 'soft; loose (e.g., knot)' |
| S 15.760 | rough(1) | $k^{h} a f e$ |
| S15.770 | smooth | maftits |
| S15.780 | sharp | dzaradzara, tsaratsarai |
| S15.790 | blunt | botfag; thuntsu |
| S15.810 | heavy | garkas; li:g |
| S15.820 | light(1) | lamgits |
| S15.830 | wet | tits; pint ${ }^{\text {d }}$ |
| S15.840 | dry | tsharts (e.g., plant leaves, stems); $k^{h} u j k$ (inanimate objects) |
| S15.850 | hot | bok |
| S 15.851 | warm | dsogits; $d_{3}(r) \tilde{a} y k$ 'very warm (weather)' |
| S15.860 | cold | lis(k) |
| S15.870 | clean | saph; tsok ${ }^{h}$ es; fufes, fufkes 'clean (human)'; nira:nes 'clean; pure (liquids)' |
| S15.880 | dirty | kri: 'dirty (internally generated dirt in humans)’; vaf 'dirty, impure'; ma:ri 'filthy (human)' |
| S15.890 | wrinkled | dzut ${ }^{\text {r }}$ up/is 'wrinkled (men, women)' |
| S15.99901 | brown | buro |
| S 15.99902 | grey | $t^{\text {h }}$ (r)ora:g |
| S15.99903 | orange | pigulgulo |
| S15.99904 | pink | gula:bi 'pink; violet' |
| S15.99906 | violet | gula:bi 'pink; violet' |
| S16.110 | the soul or spirit | dziva |


| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S16.150 | surprised or astonished | bijaray |
| S16.180 | the good luck | dam kismot |
| S16.190 | the bad luck | mari kismot |
| S16.230 | happy | $k^{h} u s i, k^{h} u f i$ |
| S16.250 | to laugh | vannu |
| S16.260 | to play | jotimu; badzja:mu (TR); badzennu (INTR) |
| S16.270 | to love | bennay lannu; bennja:mu |
| S16.290 | to kiss | $p^{\text {hapu rannu }}$ |
| S16.300 | to embrace | kakts tsummu |
| S16.310 | the pain | 2k ${ }^{h} a$ (physical); piray (mental) |
| S16.320 | the grief | duk ${ }^{\text {a ay }}$ 'disease; grief' |
| S16.340 | to regret or be sorry | golti monja:mu |
| S16.350 | the pity | ра:pu;pa:pay |
| S16.370 | to cry | krabmu |
| S16.380 | the tear | misti |
| S16.390 | to groan | dзĭgennu |
| S16.410 | to hate | migo boy tsalmu |
| S16.420 | the anger | rofay |
| S16.440 | the envy or jealousy | mith $a y$ |
| S16.450 | the shame | sorom; patsit |
| S16.480 | proud | fain |
| S16.510 | to dare | himmot lannu |
| S16.520 | brave | rothas; ba:dur |
| S16.530 | the fear | bjay, bjaymag |
| S16.540 | the danger | $k^{\text {h }}$ tarnak |
| S16.620 | to want | gја:ти |
| S16.622 | to choose | $k^{h j a l m u}$ |
| S16.630 | to hope | tsalmu |
| S16.66o | true | sotskolay |
| S16.670 | to lie(2) | alkolə刀 baitennu |
| S16.690 | to forgive | ma:phlannu |
| S16.710 | good | dam |
| S16.720 | bad | ma:ri 'bad, filthy (human)'; narak 'bad; sorrow; hell; evil'; pa:pay 'evil (n)' |
| S16.730 | right(2) | dimay |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S16.740 | wrong | vamay |
| S16.76o | the fault | golti |
| S16.770 | the mistake | golti |
| S16.780 | the blame | bodi |
| S16.790 | the praise | fayaray |
| S16.810 | beautiful | faro (m), fare (F) |
| S16.820 | ugly | majare (F) |
| S16.830 | greedy | laltsi |
| S16.840 | clever | tsalak; tust |
| S16.99903 | thank you! | ho:lase |
| S16.99914 | wild | bonsak 'wild entities (animal, plant) (n)' |
| S17.110 | the mind | dima:k |
| S17.130 | to think(1) | suntsennu (INTR); tsalmu 'to think; to feel' |
| S17.140 | to think(2) | suntjja:mu (TR) |
| S17.150 | to believe | diḑennu |
| S17.16o | to understand | somdzennu (INTR); gomu (INTR); somdzja:mu (TR) 'to understand; to explain' |
| S17.170 | to know | пети |
| S 17.171 | to guess | $t^{\text {hog lannu }}$ |
| S17.172 | to imitate | nokol lannu |
| S17.180 | to seem | tsalmu 'to think; to feel' |
| S17.190 | the idea | suntso |
| S17.210 | wise | okolsja: 'wise (n)' |
| S17.220 | stupid | muruk 'foolish'; pagal 'mad; idiot' |
| S17.230 | mad | bo:la: 'mad (person)'; pagal 'mad; idiot' |
| S17.240 | to learn | hufimu (MDL) 'to learn; to read' |
| S17.242 | to study | bantsja:mu |
| S17.250 | to teach | hunnu |
| S17.260 | the pupil | hufid thay |
| S17.270 | the teacher | maftor |
| S17.280 | the school | sakul |
| S17.310 | to remember | ja:d lannu (vol); kolay lannu (vol); kolay bannu (NVOL); ja:d bannu (NVOL) |
| S17.320 | to forget | bofimu (MDL) |
| S17.360 | secret | gupti |
| S17.380 | to explain | hagom fennu |


| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S17.420 | the cause | $t^{\text {habas }}$ |
| S17.430 | the doubt | fok; bem |
| S17.440 | to suspect | fok lannu |
| S17.441 | to betray | dokha rannu; gjab rannu; kjab rannu |
| S17.450 | the need or necessity | gjamag |
| S17.470 | difficult | kotsay; mufkil |
| S17.480 | to try | kofiflannu |
| S17.490 | the manner | $t^{\text {hims }}$ |
| S17.510 | and | ray; aj |
| S17.520 | because | $t^{\text {h }}$ lonna |
| S17.540 | or | kve, kue |
| S17.550 | yes | $\tilde{a}$ |
| S 17.560 | no | mani; nei; ma:ts |
| S17.610 | how? | hales; hala |
| S17.630 | how much? | te; tetra; teta 'how many, how much'; |
| S17.640 | what? | $t^{\text {had }}$ 'what; some' |
| S17.650 | when? | teray |
| S17.66o | where? | ham |
| S17.670 | which? | hat; hatsja: |
| S17.68o | who? | hat |
| S17.690 | why? | $t^{h} u, t^{h} u$ |
| S17.99903 | the same | iruay 'same; similar; identical' |
| S18.110 | the voice | (s)kad; avadz |
| S18.120 | to sing | git ${ }^{\text {a }}$ : lannu |
| S18.130 | to shout | tok ${ }^{\text {h }}$ nnnu ( $^{(\mathrm{NTR} \text { ) 'to shout; to shriek; to call out }}$ loud'; tok ${ }^{h} j a: m u(T R)$ 'to shout; to shriek; to call out loud' |
| S18.150 | to whisper | $k^{h} u \int p u f j a: m u($ TR); futputja:mu (TR) |
| S18.160 | to mumble | gudz budzennu |
| S18.170 | to whistle | fvígja:mu |
| S18.180 | to shriek | tok ${ }^{\text {hennnu (INTR) 'to shout; to shriek; to call out }}$ loud'; tok ${ }^{h j a: m u ~(T R) ~ ' t o ~ s h o u t ; ~ t o ~ s h r i e k ; ~ t o ~ c a l l ~ o u t ~}$ loud' |
| S18.190 | to howl | ha:pe dzĩgjafimu (MDL) |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S18.210 | to speak or talk | lonnu (NON-1/2O) 'to tell; to speak; to talk', riymu (B), rəŋти (S) (1/20) 'to tell; to speak; to talk' |
| S18.211 | to stutter or stammer | $p^{\text {app }}{ }^{\text {ªpennu }}$ |
| S18.220 | to say | baitja:mu (TR); ba:tennu (INTR) |
| S18.221 | to tell | ba:tja:mu (TR); ba:tennu (INTR); lonnu (NON-1/2O) 'to tell; to speak, to talk', riymu (B), rəŋmu (S) (1/20) 'to tell; to speak; to talk' |
| S18.222 | the speech | bafon; ba:t, ba:taך, ba:tij; galay |
| S18.230 | to be silent | tsurkay nimu (S), tsutkay nimu (B) |
| S18.240 | the language | boli; b( ${ }^{h}$ a: $j a ;(s) k a d$ |
| S18.260 | the word | tu |
| S18.280 | the name | na:may |
| S18.310 | to ask(1) | imu; иппи 'to take; to ask for' |
| S18.320 | to answer | dzabab rannu |
| S18.330 | to admit | hã k ${ }^{\text {hurmu }}$ |
| S18.340 | to deny | hurfimu (MDL) |
| S18.350 | to ask(2) | unnu 'to take; to ask for' |
| S18.360 | to promise | dorom rannu; ren rannu |
| S18.370 | to refuse | тәпа lannu |
| S18.380 | to forbid | malannu |
| S18.390 | to scold | dopkja:mu; galja: rannu 'to abuse' |
| S18.410 | to $\operatorname{call}(1)$ | tok ${ }^{\text {jaa:mu; arja:mu 'to call; to invite' }}$ |
| S18.440 | to threaten | рјаути |
| S18.450 | to boast | ऽәуа геппи |
| S18.510 | to write | tfemu 'to write; to draw' |
| S18.520 | to read | hufimu (MDL) |
| S18.560 | the paper | kagli |
| S18.570 | the pen | pen; kolom |
| S18.610 | the book | kztab; $\mathrm{kot}^{\text {hi }}$ 'Buddhist scriptures' |
| S18.670 | the poet | kavita tjetsja: (M), kavita tjetse: (\%) |
| S18.710 | the flute | banfuri; murli; ba:jay |
| S18.720 | the drum | dol 'drum with a leather membrane on both ends' |
| S18.730 | the horn or trumpet | ransin 'trumpet' |
| S18.740 | the rattle | $t^{\text {h }}$ unt ${ }^{\text {h }}$ un |
| S19.110 | the country | defay; muluk 'country; village' |

(cont.)
Id Gloss Kinnauri

| S19.120 | the native country | dzonom thanay |
| :---: | :---: | :---: |
| S19.150 | the town | Ser |
| S19.160 | the village | gra:may; nogrij; muluk 'country; village' |
| S19.170 | the boundary | simaך; bana |
| S19.210 | the people | lokas; pakres |
| S19.230 | the clan | gor |
| S19.240 | the chieftain | gobats; kardarr |
| S19.250 | the walking stick | $t^{\text {h }}$ umma: |
| S19.310 | to rule or govern | raidz lannu |
| S19.320 | the king | ra:dza |
| S19.330 | the queen | ra:ni |
| S19.360 | the noble | damgoru (dam-gor-u [good-clan-Poss]) |
| S19.370 | the citizen | muluku mi; pordza |
| S19.410 | the master | ma:lik |
| S19.420 | the slave | lantsja: (M) 'slave; worker'; dasi (F); tshokri (F) 'slave at king's service' |
| S19.430 | the servant | $t^{h}$ unpa (F); lantsja: (M) 'slave; worker'; nukur (M, F) |
| S19.440 | the freeman | a:dzat mi |
| S19.4450 | to liberate | a:dzat lannu |
| S19.450 | to command or order | hukum lannu |
| S19.460 | to obey | hukum monja:mи |
| S19.470 | to permit | lannu; fennu |
| S19.510 | the friend | dost; sangis; gurbaii; kones 'male friend of a man'; konets 'female friend of a woman' |
| S19.520 | the enemy | dusmon |
| S19.540 | the neighbour | pafpay |
| S19.550 | the stranger | na:may mi |
| S19.560 | the guest | ponukes |
| S19.5650 | to invite | arja:mu (TR) (formal); kunnu (TR) (informal); arja:fimu (MDL) |
| S19.570 | the host | memani lantsja |
| S19.580 | to help | seta rannu |
| S19.590 | to prevent | rok ${ }^{h} \mathrm{a}$ :mu |
| S19.610 | the custom | riva:dz 'tradition; custom' |
| S19.620 | the quarrel | da:jo |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S19.630 | the plot | sa:dzif |
| S19.650 | to meet | $t^{\text {h }} u k m u(\mathrm{TR}) ; t^{\text {h }} u k j / i m u(\mathrm{MDL})$ |
| S19.720 | the prostitute | dek ${ }^{\text {r }}$ ra mefjatse |
| S19.99902 | Australia | astrelia |
| S19.99903 | China | tim |
| S19.99904 | Egypt | misar |
| S19.99906 | Greece | junan |
| S19.99907 | India | ba:rat |
| S19.99910 | sir | dzanab |
| S19.99911 | Spain | sapen |
| S19.99913 | Brazil | bradzilu |
| S19.99914 | the certificate | sertifikat |
| S19.99915 | the Chinese person | tfinu |
| S19.99917 | the European | juropu |
| S19.99922 | the French person | $p^{h} r a ̃ s u$ |
| S19.99925 | the hockey | hoki |
| S19.99930 | the policeman | pulsija;pulis |
| S19.99935 | the sport | $k^{h} e l$ |
| S19.99936 | the student | hufidja |
| S20.110 | to fight | kulfimu (MDL); da:fimu (MDL) 'to fight verbally; to quarrel' |
| S20.130 | the war or battle | lorai |
| S20.140 | the peace | fainti 'peace; happiness' |
| S20.150 | the army | $p^{\text {hod }}$ od |
| S20.170 | the soldier | $p^{h}$ odzi |
| S20.210 | the weapon | odzar |
| S20.222 | the battle-axe | ostorsostor |
| S20.240 | the bow | danuf |
| S20.250 | the arrow | bain; ti:r |
| S20.260 | the spear | bala |
| S20.270 | the sword | traval |
| S20.280 | the gun | tupuk |
| S20.330 | the helmet | top |
| S20.340 | the shield | da:l |
| S20.360 | the tower | $k^{h} \tilde{a} b a$ |
| S20.440 | to defend | botjja:mu |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S20.470 | the captive or prisoner | kedi |
| S20.471 | the guard | gaid |
| S20.510 | the fisherman | matf ${ }^{\text {a }}$ ares |
| S20.540 | the fishnet | dja:l |
| S20.610 | to hunt | eray lannu |
| S20.620 | to shoot | tupuk badzja:mu |
| S20.630 | to miss | dzilmu |
| S20.640 | the trap | pindzor; koy |
| S21.110 | the law | ka:nun |
| S21.150 | the court | kot |
| S21.160 | to adjudicate | $p^{h}$ esla rannu |
| S21.170 | the judgment | $p^{\text {hes }}$ la |
| S21.180 | the judge | djads |
| S21.210 | the plaintiff | mukadma lantsja: |
| S21.220 | the defendant | mukadəma loretsja: |
| S21.230 | the witness | gva |
| S21.240 | to swear | ren dza:mu |
| S21.250 | the oath | kosom |
| S21.310 | to accuse | bodi rannu |
| S21.340 | to acquit | bori lannu; dofi lannu |
| S21.350 | guilty | muldzim |
| S21.360 | innocent | sa:day 'innocent; simple (character-wise)'; beksur |
| S21.370 | the penalty or punishment | da:nay |
| S21.380 | the fine | sadza, sadza |
| S21.390 | the prison | ked; obor 'dungeon' |
| S21.460 | the arson | mekrub |
| S21.510 | to steal | $k^{h} u t$ imu; tforjay lannu |
| S21.520 | the thief | toras, tores |
| S22.110 | the religion | dorom, daram |
| S22.120 | the god | bogan 'Hindu god'; devi ‘Hindu godess'; devta: 'Hindu god'; pormeferes (м); fu 'village god,;; ds ${ }^{h}$ opra:djas (м) 'death god’ |
| S22.130 | the temple | deoray; deoriŋ; kot ${ }^{h}$; kot ${ }^{h}$ ijelay; gonpa 'Buddhist temple'; santhay 'temple compound' |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S22.1310 | the church | tart |
| S22.1320 | the mosque | mastjid |
| S22.150 | the sacrifice | padza 'ritual sacrifice' |
| S22.160 | to worship | piḑja:mu |
| S22.170 | to pray | dontrennu 'to pray (in one's heart)'; ordz lannu 'to pray (orally)' |
| S22.180 | the priest | pidjares; ḑomo (F) ‘lama’; sod (M), sodonig, sodnig (F); braman 'priest; brahmin' |
| S22.190 | holy | fu:ranu dzaga; alayes |
| S22.220 | to preach | fu:mu |
| S22.240 | to curse | fa:p rannu |
| S22.260 | to fast | kadaflannu |
| S22.310 | the heaven | sorg; soroglok |
| S22.320 | the hell | norok, narak |
| S22.350 | the demon | rakfas (м) |
| S22.370 | the idol | kundats |
| S22.420 | the magic | dza:du |
| S22.430 | the sorcerer or witch | dagin 'sorcerer; witch'; turel (F) |
| S22.440 | the fairy or elf | bonmets |
| S22.450 | the ghost | rakfas; funa |
| S22.470 | the omen | apfagun |
| S22.99905 | the funeral | dag |
| S22.99909 | the muslim | musalman |
| S22.99910 | the rosary | kont ${ }^{\text {hi }}$ |
| S23.1000 | the radio | reru |
| S23.1100 | the television | tibi |
| S23.1200 | the telephone | mobajl; (teli)phon |
| S23.1300 | the bicycle | sajkal |
| S23.1350 | the motorcycle | motarsajkal |
| S23.1400 | the car | ga:ci; ka:r |
| S23.1500 | the bus | bos, bas |
| S23.1550 | the train | rel; tren |
| S23.1600 | the airplane | (havai)djadz |
| S23.1700 | the electricity | bidzali |
| S23.1750 | the battery | sel(l) |

(cont.)
Id Gloss Kinnauri

| S23.1850 | the motor | motor |
| :---: | :---: | :---: |
| S23.1900 | the machine | mafin |
| S23.2000 | the hospital | aspatal |
| S23.2100 | the nurse | nors |
| S23.2200 | the pill or tablet | golits |
| S23.2300 | the injection | sua |
| S23.2400 | the spectacles/ <br> glasses | enak; tfafma |
| S23.3000 | the government | gorment |
| S23.3100 | the president | raftrapati |
| S23.3200 | the minister |  |
| S23.3300 | the police | pulis |
| S23.3400 | the driver's license | gartitfalja:mu leszns |
| S23.3500 | the license plate | lesans palet |
| S23.3600 | the birth certificate | dzormay sartiphiket |
| S23.3700 | the crime | pa:p |
| S23.3800 | the election | elekfon, ilekJan |
| S23.3850 | the address | pota |
| S23.3900 | the number | nar |
| S23.3950 | the street | go:lin |
| S23.4000 | the post/mail | da:k |
| S23.4100 | the postage stamp | da:k tikot |
| S23.4200 | the letter |  |
| S23.4300 | the postcard | postkar |
| S23.4400 | the bank (financial institution) | beŋk |
| S23.5000 | the tap/faucet | nalka; tunti |
| S23.5100 | the sink | arbo 'bronze vessel for washing hands' |
| S23.5200 | the toilet | $k^{h}$ asurip |
| S23.5300 | the mattress | $p o f$ |
| S23.5400 | the tin/can | ti: 'tin'; ken 'can' |
| S23.5500 | the screw | pet ${ }^{\text {f }}$ |
| S23.5550 | the screwdriver | petjkas |
| S23.5600 | the bottle | botol |
| S23.5650 | the candy/sweets | emets; mithai |
| S23.5700 | the plastic | palastik |

(cont.)

| Id | Gloss | Kinnauri |
| :---: | :---: | :---: |
| S23.5750 | the bomb | bomb |
| S23.5900 | the cigarette | sigrit |
| S23.6000 | the newspaper | akhbar |
| S23.6100 | the calendar | kalendar |
| S23.6200 | the film/movie | $p^{\text {hilam }}$ |
| S23.6300 | the music | badzgi |
| S23.6400 | the song | gana; gitay, git ${ }^{\text {hay }}$ |
| S23.9000 | the tea | ta ${ }^{\text {a }}$ |
| S23.9100 | the coffee | kop ${ }^{\text {i }}$ |
| S23.99901 | the license | lesans |
| S24.0100 | to be | to; du; nimu 'to exist; to stay' |
| S24.0200 | to become | hatfimu 'to have; to become' |
| S24.0300 | without | ma:ts |
| S24.0400 | with | $(-) r \partial y[(-) \mathrm{com}]$ |
| S24.0500 | through | madzay-s |
| S24.0600 | not | ma- |
| S24.0700 | this | hojo, dzo [DEM.PROX] |
| S24.0800 | that | hodo; no, hono [DEM.DIST.vis] |
| S24.0900 | here | hadzay |
| S24.1000 | there | $d \partial \eta$ [there.vis]; nə [there.nvis] |
| S24.1100 | other | aid |
| S24.1200 | next | day 'near; next; beside' |
| S24.1300 | same | idi |
| S24.1400 | nothing | $t^{\text {hatsi, mani }}$ |
| S24.99910 | someone | hatta (hat-ta [who-dsm]) |
| S24.99912 |  | dok 'then; after'; dema (S), tema (B) 'then; again' |
| S24.99913 | they (dual) | donif |
| S24.99914 | we (dual inclusive) | kijay |
| S24.99917 | which | hat |
| S24.99919 | you (dual) | kijl |

## A Linguistic Sketch of Navakat

## 1

Introduction

Nako is a small, high-altitude village (3,6oom above sea level) in Upper Kinnaur. ${ }^{1}$ Like a green oasis amidst its immense, dry and barren mountainous surroundings, ${ }^{2}$ it is situated in the north-east corner of the district of Kinnaur. It is about 100 km north-east of Reckong Peo, the district headquarter of Kinnaur (see Chapter 1, Section 3). On its east is the autonomous region of Tibet in China and on its north-west is the Spiti valley.

Nako belongs administratively to the Hangrang sub-tahsil of the Poo tahsil (see Chapter 1). As Nako is located within the restricted zone region in India, foreign nationals are required to seek an inner line permit to visit this village. ${ }^{3}$ According to the 2011 Indian census report, ${ }^{4}$ Nako had 128 households, with a total population of 572 ( 274 males and 298 females). The population traditionally belongs to two social communities. Administratively the two communities are officially referred to as the "scheduled caste" community and the "scheduled tribe" community (see Chapter 1, Section 4). The latter is the largest group in the village, with a total population of 532 ( 255 male and 277 female). Distinct from the Sangla region, the scheduled caste community in Nako speaks the same language as the scheduled tribe community, even though socially the two communities maintain separate identities. ${ }^{5}$

The Nako village is known as nau among its residents. In more official contexts, the village is referred to as "Nako", and this is the name which will be used in this work to refer to this village, in accordance with the wishes of my lan-

[^31]guage consultants. The speech of this village is referred to as nàva-kat [p.namespeech] [nàvakat] in the local language. The form Navakat will be used here to refer to this language, ${ }^{6}$ which is known in the literature as Bhoti Kinnauri (nes) or as a "Bhoti dialect".

All Sino-Tibetan (ST) varieties of Upper Kinnaur are in a sorry state with respect to their documentation. There is a sketch grammar by D.D. Sharma (1992: 97-196) where the language is referred to as Nyamkad, based on the speech of the Poo and Namgya villages. The language of the Nako village is mentioned only in the following works, where some data can also be found: Saxena (2011, 2012), Saxena and Borin $(2011,2013)$ and the Comparative dictionary of Tibetan dialects (CDTD; Bielmeier et al. MS 2008), where the language (called "Nako") is classified as belonging to the IBA (North West Indian border area dialects) sub-group of Western Innovative Tibetan.

The analysis of Navakat presented in this chapter is based on direct-elicited data and free narratives, which I collected. The direct-elicited material was primarily collected from Mr. Padam Sagar, a native of the Nako village, who was in his mid-thirties when I began working on Navakat in 2009. The free narratives were collected from older Nako speakers. As this is the first linguistic description of the speech of the Nako village, most examples provided here represent the direct-elicited speech to get the basic paradigm-like information of this language. As this description will show, the linguistic structure of Navakat is very similar to other Tibetan varieties.

[^32]Phonology

### 2.1 Consonants

The consonant phonemes in Navakat are shown in Table 27, and a list of minimal pairs is provided below. The status of prenasalized consonants is discussed separately in Section 2.1.1.
table 27 Consonant phonemes in Navakat

|  | Bilabial | Alveolar | Retroflex | Palatal | Velar | Glottal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plosive | pb | td | t d |  | kg |  |
| Aspirated plosive | $\mathrm{p}^{\text {h }}$ | $\mathrm{t}^{\text {h }}$ | $t^{\text {h }}$ |  | $\mathrm{k}^{\text {h }}$ |  |
| Nasal | m | n |  | n | $\eta$ |  |
| Fricative |  | s z |  | $\int 3^{7}$ |  | h |
| Affricate |  | tsct |  | tfd3 |  |  |
| Aspirated affricate |  | ts ${ }^{\text {h }}$ |  | $\mathrm{t}^{\text {h }}$ |  |  |
| Lateral |  | 1 |  |  |  |  |
| Trill |  | r |  |  |  |  |
| Approximant | v | $\breve{n}^{8}$ |  | j |  |  |

Minimal (or near-minimal) pairs: Consonants

| $\mathrm{p}: \mathrm{b}$ | pénba | 'Saturday' | bámba | 'lamp' |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{p}: \mathrm{p}^{\text {h }}$ | páy | 'tree' | $p^{h a ́ g}$ | 'spindle' |
| t: d | tà | 'now' | ${ }^{\text {ndàtfa }}$ | 'to chew' |
| t: t | tá | 'stallion' | tá | 'hair (head)' |
| $t: d$ | tàymo | 'cold' | dùmpo | 'thick (round objects)' |
| $\mathrm{t}^{\mathrm{h}}: \mathrm{t}^{\mathrm{h}}$ | $t^{\text {húkpa }}$ | 'soup (traditional)' | $t^{h} u$ kpa | 'quarrel' |
| $t: t^{\text {h }}$ | tá | 'hair' | $t^{h}{ }^{\text {á }}$ | 'hawk' |
| $\mathrm{k}: \mathrm{k}^{\text {h }}$ | káyba | 'leg' | khárba | 'house' |
| $\mathrm{s}: \int$ | sáktfa | 'to collect, to hoard' | fáktfa | 'to split' |
| tf: d3 | téja | 'fifteen' | $\left({ }^{n}\right)$ djè̀nu | 'green' |
| $\mathrm{t}: \mathrm{g}^{\text {h }}$ | tú | 'ten' | $t^{h} u$ | 'water' |
| k: g | kúnma | 'thief' | gùnga | 'winter' |
| ts: d | tsáktfa | 'to sieve, to strain' | ${ }^{n}$ dzàktfa | 'to climb' |

[^33]| $\begin{aligned} & \mathrm{ts}: \mathrm{ts}^{\mathrm{h}} \\ & \mathrm{~s}: \mathrm{ts}^{\mathrm{h}} \end{aligned}$ | tsá: | 'bottom' 'vein' | $\begin{aligned} & \text { tshám }_{\text {tshá }} \end{aligned}$ | 'meditation <br> 'salt' |
| :---: | :---: | :---: | :---: | :---: |
| s:3 | sèrtfa | 'to say' | zèttfa | 'to forget' |
| ts: t | tsán | 'nest' | tàn | 'north' |
| m : n | má | 'wound' | ná | 'nose' |
| $\mathrm{n}: \mathrm{\eta}$ | ná | 'nose' | já | 'five' |
| $\mathrm{m}: \mathrm{y}$ | mán | 'medicine' | †án | 'early' |
| n : n | nám | 'sky' | námbo | 'together' |
| $\mathrm{m}: \mathrm{y}$ | nàm | 'when' | nà | 'inside' |
| r:l | ràma | 'goat' | làm | 'path' |

The word-final stops seem to be slowly disappearing in Navakat. ${ }^{9}$ They are frequently realized as voiceless stops or they remain unreleased (e.g. [gjèp] 'behind'; [gjèt] 'eight'; [tfálak] 'thing'; [jòp ] 'many (CNT)'). At the present stage of its development though, it is still possible to identify these word-final consonants in slow speech and, when asked to clarify, the language consultants were able to identify the consonant. However, when the same stop occurs in initial or medial position, it is articulated more clearly. In a very few cases, the loss of a final stop correlates with a compensatory lengthening of the preceding vowel, e.g., [tfá:] 'iron' vs. [tfákth ap] 'fireplace made of iron'. The final consonant in recent loanwords is, however, articulated more clearly. For example, [ìnt] 'brick' (Indo-Aryan loanword), [bèlt] ~ [bèlt] '(modern) belt'.

Navakat retroflex consonants are not distinctly retroflex. Their place of articulation is more towards post-alveolar. In some instances, there is variation in their phonetic realization, where at times, their realization is more like an alveolar stop followed by an $r$. The latter is indicated as " $(r)$ " in examples. For example, [t(r)ò ] 'wheat', [ $\left.{ }^{\text {nd }} \mathrm{d}(\mathrm{r}) \mathrm{u} \mathrm{l}\right]$ 'snake'.

Similarly, the intensity of the aspiration is very low, if any, in loanwords which contain voiced aspirated consonants, e.g., [bhàgua:n] 'god', [b(h)àlla:] 'spear'. $p^{h}$ is sometimes realized as [f] (see Appendix $3^{B}$ for examples).

An alternation between $p, p^{h}$ and $b ; t, t^{h}$ and $d$; and $t, t^{h}$ and $d$ is found when the consonant occurs word-initially and the first syllable has a low tone. For example, [bàl] ~ [phàl] ~ [pàl] 'wool', [bètlu] ~ [phètlu] ~ [pètlu] 'manner', [bèma] ~ [phèma] ~ [pèma] 'sand', [bètfa] ~ [phètfa] ~ [pètfa] 'to do (NPST)', [dùtpa] ~ [thùtpa] ~ [tùtpa] ~ [thỳtpa] 'to smoke'.

[^34]
### 2.1.1 Prenasalization

There are some instances of prenasalization in Navakat, and the existence of minimal pairs requires us to recognize prenasalization as phonemic, even if only marginally so. It occurs only word-initially in my data, and almost exclusively with bilabial, dental and retroflex voiced stops and affricates, although there are also occasional instances of other prenasalized consonants (e.g. ${ }^{n} z u ̀: n$ 'finger'). Rather than positing a full series of prenasalized consonants, I have chosen to treat prenasalization as a reduced (extra-short) variant of $n:[\breve{n}]$ (written ${ }^{n}$ in the phonemic orthography adopted here).

Minimal pairs: Prenasalization

| dàmdza | 'to tie' | ${ }^{n}$ dàmdza | 'selection' |
| :--- | :--- | :--- | :--- |
| dàtfa | 'to chase' | ${ }^{n}$ dàtfa | 'to chew' |
| dỳn, dùn | 'seven' | ${ }^{n}$ dỳn $n \sim{ }^{(n)}$ dùn | 'front' |

### 2.2 Vowels

The vowel phonemes of Navakat are shown in Table 28, and a list of minimal pairs is provided below. For a discussion of the status of nasal vowels, see Section 2.2.1.
table 28 Vowels in Navakat

| i (y) / i ( y : ) | ( u$) / \mathrm{H}$ ( H ) |
| :---: | :---: |
| e (ø) / e: (øx) |  |
|  | a / a |

Minimal (or near-minimal) pairs: Vowels

| $\mathrm{i}: \mathrm{e}$ | kírkir | 'round (of small objects), circle' | kérker | 'standing position' |
| :--- | :--- | :--- | :--- | :--- |
| $\mathrm{e}: \mathrm{a}$ | t $^{h}{ }^{\text {étpo }}$ | 'big' | t'átpa | 'penalty' |
| $\mathrm{a}: \mathrm{o}$ | $k^{h a ́ a}$ | 'mouth' | $k^{h o ́}$ | $[3 \mathrm{SG.NH}]$ |
| $\mathrm{o}: \mathrm{u}$ | só | 'tooth' | sú | 'who' |
| $\mathrm{i}: \mathrm{u}$ | tík | 'word' | tùk | 'poison' |

The status of $y, z$ and $ø$ in Navakat is unclear. In some cases these nonback rounded vowels and the back rounded vowels occur as variants of the same vowel. Further, as the following examples illustrate, the front and central rounded vowels mostly occur, when they are followed by $t, d, r, n$ and $l$.

| [tỳtpa] ~ [tùtpa] | 'smoke' | [ ${ }^{\text {dy }}$ y l$] \sim\left[{ }^{\text {n }}\right.$ dùl $]$ | 'snake' |
| :---: | :---: | :---: | :---: |
| [dùlma] ~[dòlma] | 'a name' | [súr ] ~ [súr] | 'piece' |
| [ ${ }^{\text {dy }}$ y $\left.{ }^{\text {l }}\right] \sim$ [ ${ }^{\mathrm{n}}$ dùl] | 'snake' | [lı̀̀tpa] ~ [lùtpa] ~ [lòtpa] | 'cough' |
| [bòent ${ }^{\text {c }}$ ] | 'womb' | [st́rtup]] ~ [súrtu:p̉] | 'ring' |
| [nǿnpo] ~ [nónpo] | 'sharp, pointed' | [nòtfun] ~ [nòtfun] | 'y.brother' |
| [sáyın] ~ [sáyon] | 'seed' | [š̀vせn] ~ [sèvon] | 'itch' |

There are, however, also some cases where the front and central rounded vowels occur, even though the vowels are not followed by one of the aforementioned consonants.

| [gø̀emo] ~ [gòemo | 'night' | [kø̀elak] ~ [kòelak] | 'cloth' |
| :---: | :---: | :---: | :---: |
| [ $\mathrm{t}^{\text {h}}$ ǿe] | 'religion' | [lèdui] ~ [lèdui] | 'initiation ceremony' |
| [gjø̀ḑa] ~ [gjùḑa] | 'to have sex' | [matshǿva] ~ | 'unripe' |
|  |  | [matfózua] ~ |  |
|  |  | [matfóeva] |  |

There is free variation between close-mid and open-mid vowels; $e$ is also realized as $[\varepsilon]$ and $o$ is, at times, also realized as [ 0 ], without affecting the meaning. This includes also some IA loans (e.g. [ròti] ~ [ròti] 'chapati'). [a] and [o] variation is also observed in IA loans (e.g. [djàngal] ~ [ḑàygol] 'forest').

| $[$ lép $] \sim[$ lép $]$ | 'arrive $(\mathrm{H})$ ' | $\left[\right.$ th $^{\text {hétpo }] ~} \sim[$ ty hétpo $]$ | 'big' |
| :--- | :--- | :--- | :--- |
| $[$ só $] \sim[$ sś $]$ | 'tooth' | $[$ zòdza $] \sim[$ zòdga $]$ | 'to make' |

A short " $h$ " is heard word-initially when the word begins with a vowel (e.g. [( ${ }^{\text {h }}$ )òndga] 'to come', [(h)àtse] 'fox'). Similarly, a short "h"-like sound is heard when a word ends in a vowel (e.g. [( $\left.\left.\left.{ }^{\mathrm{n}}\right) \mathrm{bu} \mathrm{u}^{\mathrm{h}}\right)\right]$ 'insect, worm').

Length is phonemic in Navakat. Some minimal pairs for vowel length are provided here.

| $k^{h} a ́ a$ | 'mouth' | $k^{h}$ á: | 'snow' |
| :--- | :--- | :--- | :--- |
| gà | 'saddle' | gà: | 'better' |
| ná | 'nose' | ná: | 'day after tomorrow' |
| lù | 'music' | lù: | 'tradition, custom' |
| là | 'mountain' | là: | 'work(N)' |

Apart from this, there are also instances where a sequence of two vowels appears (e.g. líu 'flute'; bòa 'foam'). Here, too, some variation is found, without any change in meaning. For example,

| [gjàtfo] ~ [giatfo | 'sea' | [rìa] ~ [rìja] | 'woods or forest' |
| :---: | :---: | :---: | :---: |
| [tféra] ~ [ffáera] | 'garden' | [gũ̀ã] ~ [gõ̀ã] | 'egg' |
|  | 'rice' | [rèan], [rien] | 'beggar' |
| [ $\int$ óa] ~ [ [fúa] | 'boil (N)' | [tíu] ~ [téu] | 'monkey' |

Finally, as mentioned earlier, word-final consonants are, at time, realized as their corresponding voiceless consonants or as unreleased consonant. When the word-final consonant is a nasal, the vowel preceding it is nasalized and in some cases lengthened, and the consonant is dropped (e.g., [ ${ }^{z}$ zùm] $\sim$ [ ${ }^{n}$ zǜ:] 'finger'; [lúy] ~ [lứ:] ‘air'; [phú:n] ~ [phû́:] 'cave’). In the word list in Appendix 3B we have provided the more detailed forms (e.g. lú $\operatorname{instead~of~lứ:~for~'air').~There~are~}$ also instances of nasal vowels occurring without a following nasal consonant (e.g. [gù̀ã] ~ [gò̀ã] 'egg'), possibly making nasal vowels marginally phonemic. Nasalization is marked here only in the last-mentioned cases.
2.2.1 Tone

Tone is phonemic in Navakat in that there are minimal pairs where the only distinguishing linguistic feature is the tonal distinction. Such pairs display a difference in intonation as well as in pitch, with the vowels with a low tone displaying a falling-rising tonal contour and the vowels with a high or neutral tone exhibiting a level tonal contour.

Minimal pairs: Tone

| làm | 'path' | lám | 'shoe' |
| :--- | :--- | :--- | :--- |
| nàm | 'when' | nám | 'sky' |
| mà | $[1 \mathrm{SG}]$ | má | 'wound' |
| jà | $[1 \mathrm{SG}](\mathrm{H}$ towards listener $)$ | já | 'five' |
| lá | 'tantra performer $(\mathrm{M})$ ' | là | 'mountain' |

In the following instances difference in transitivity is indicated by tonal contrast only.

| kòndza | 'to put on (INTR)' | kóndza ${ }^{10}$ | 'to put on (TR)' |
| :--- | :--- | :--- | :--- |
| kùktfa | 'to bend (INTR)' | kúktfa | 'to bend (TR)' |
| fà:fa | 'to blow (INTR)' | fá':fa | 'to blow (TR)' |
| lùktfa | 'to untie (INTR)' | lúktfa | 'to untie (TR)' |

```
jiktfa 'to self-destruct (INTR)' Jiktfa 'to destroy (TR)'
tàtfa 'to break (INTR)' tátfa 'to break (TR)'
```

Grammatical morphemes, such as the case markers and conjunctions, do not take tone. Exceptions are some grammatical morphemes in the verb complex: (-)sốj [PST.VIS], tò [PRobability], túk[INFERENCE].

The tonal distinction is predictable to a large extent. This is consistent with the correlates of the tonal distinctions found in Tibetan in general, i.e., that the main tonal distinction is found only in the first syllable, where plain nasals and liquids tend to co-occur with low tone, but nasals and liquids with preradicals correlate with high tone (Huang 1995; Zeisler 2004: 250-257). ${ }^{11}$ Vowels following word-initial voiced consonants tend to have low tone. A slight aspiration on the first syllable correlates with the presence of the low tone. ${ }^{12}$ The tone of the first vowel determines the tone of the following syllable.

## 3 Noun Phrase

### 3.1 Noun Phrase Structure

The noun phrase in Navakat has the following basic structure:

$$
\text { (DEM / NP }{ }_{\text {Poss }} / \text { CL-NMLZ) } N(-\mathrm{PL})((\text { Adv }) \text { Adj) })(\text { Num })(=C A S E)
$$

Demonstrative pronouns precede nouns (see Section 3.3.1). $\mathrm{NP}_{\mathrm{PO} \text { oss }}$ is a posses-sive-marked NP, with the same structural possibilities as the NP of which it is a part, including the possibility of containing another embedded $\mathrm{NP}_{\text {Poss. }}$. Nominalized clauses (CL-NMLZ) also go into the determiner slot before the head noun (see Section $5 \cdot 3$ ), rather than the modifier position after it.
(1) í: $k^{h a ́ y b a ~ t h e ́ t p o=r a y ~ m a ́ r v o ~ n u ́ v o ~ m a ̀=j i ~ a ́ z o ~}$
this house big=COM red both $15 G=$ poss o.brother
nò-vã:(k)
buy-PST.FACT
'My older brother bought these two big red houses.' (Indirect knowledge)

[^35]Adverbs (or intensifiers) such as ${ }^{n} d j i: \int a$ 'much, very' precede the adjective.
(2) píti=na ò:kven tándertal-tshó ndjì:fa thétpo ò-kã:k p.name=LOC SPECIFIER p.name-lake much big COP-NPST.FACT 'The Chandertal lake which is in Spiti, is very big.' (Indirect knowledge)

The following two constructions are used to express NP disjunction.
Construction 1
(3) jày=na dòlma jày=na ságar nàu=na ò $-\tilde{a}:(k)$ either=LOC i.name either=LOC i.name p.name=LOC come-NPST.FACT 'Either Dolma or Sagar will come to Nako.' (Indirect knowledge)
(4) nànbar mà jày=na sáygla=la jàn=na píti=la next.year 1SG either=LOC p.name=ALL either=LOC p.name=ALL ${ }^{n}$ dò-an
go.NPST-FUT.EGO
'Next year, I will either go to Sangla or to Spiti.'

Construction 2
(5) nàjbar mà sáygla=raך píti=nasu sá tikk=tu ${ }^{13}$ next.year 1SG p.name=COM p.name=ABL place one=TERM ${ }^{n} d \grave{o}-a n$
go.NPST-FUT.EGO
'Next year, among Sangla and Spiti, I will go to one place.'
(6) ságar=tay dòlma=nasu tjik~tjik ${ }^{14}$ dilli=la òy-vã:(k)
i.name $=$ COM i.name=ABL one $\sim E C H O$ p.name=ALL come-PST.FACT
'Among Sagar and Dolma, one of them came to Delhi.' (Indirect knowledge)

### 3.2 Nouns

3.2.1 Noun Structure

Most simplex nouns in Navakat are mono- or disyllabic.

[^36]
### 3.2.1.1 Monosyllabic Nouns

Monosyllabic nouns may end in vowels (long or short) or consonants. As mentioned above, in the word-final position stops tend to be realized either as voiceless stops ( $p, t$ or $k$ ) or they remain unreleased $(\vec{p}, \vec{t}, \vec{k}$ ). Monosyllabic nouns may also end in sonorant consonants (nasals, $r$ or $l$ ).

| $k^{h i}$ | 'dog' | rè: | 'cotton' |
| :--- | :--- | :--- | :--- |
| ndè | 'ghost' | nùp | 'west' |
| gà | 'saddle' | mík | 'eye' |
| ty'ú | 'water' | tyák | 'boundary' |
| ná | 'nose' | kùr | 'tent' |
| lò | 'year' | múl | 'silver' |
| ndù̀: | 'bracelet' | dén | 'mat (to sit on)' |
| líu | 'flute' | minn ${ }^{15}$ | 'name' |

### 3.2.1.2 Disyllabic Nouns

The final syllable in the disyllabic nouns is frequently one of the following: -mo, -po, -ma or -pa.
-mo: Many, though not all, disyllabic nouns which end in -mo, have female referents.

| pòmo | 'girl, daughter' | támo | 'mare' |
| :--- | :--- | :--- | :--- |
| t'́nmo | 'sister' | $g(j)$ èlmo | 'queen' |
| nòmo | 'younger sister' | tsópmo | 'prostitute' |
| gènmo | 'old woman' | tshámo | 'granddaughter, niece, daughter-in-law' |
| nìnmo | 'day, midday' | sénmo | 'fingernail' |
| rìmo | 'line' | pímo | 'knee' |

-po: Nouns ending in -po refer to animate objects (including humans), to inanimate objects, as well as to abstract phenomena. Human nouns ending in -po always have a male referent. -po is realized as -po or -bo/-vo. -bo and -vo, which are in free variation, occur when the preceding syllable ends in a sonorant consonant or a vowel; -po occurs when the preceding syllable ends in a voiceless consonant.

[^37]| jókpo | 'servant, slave' | páybo | 'witness' |
| :--- | :--- | :--- | :--- |
| thúkpo | 'noble, rich (man)' | mībo, minbo ${ }^{16}$ | 'brother' |
| távo | 'rooster, fowl' | $g(j) e ̀ l v o ~$ | 'king' |

-pa: Nouns ending in -pa primarily have inanimate referents (see Set 1 below), but there are some nouns which have human referents. Such nouns have an agentive nominalized interpretation '(the) one who ...' (see Set 2 below). This is, however, not a productive process in Navakat. - $p a$ is realized as -pa or -ba/-va. To a large extent, the distribution of $-p a$ and $-b a /-v a$ is phonologically determined, where -pa predominantly occurs when the preceding syllable ends with a voiceless consonant and $-b a /-v a$ tends to occur when the last element of the preceding syllable is voiced. ${ }^{17}$

Set 1

| látpa | 'brain' | kútpa | 'thread' |
| :--- | :--- | :--- | :--- |
| bìkpa | 'walking stick' | $t^{h}$ úkpa | 'soup' |
| líkpa | 'testicles' | fúkpa | 'wing' |
| púpba | 'shoulder' | sàmba | 'bridge' |
| n dàmba | 'cheek' | $k^{h}$ hápba | 'house' |

Set 2
$\begin{array}{ll}\text { tshóyba } & \text { 'merchant (male, female)' } \\ \text { tshámba } \text { cthóy 'business' }^{\text {'one who meditates' }} & \text { cf. tshám 'meditation' }\end{array}$
-ma: This noun ending always has either a sonorant consonant or a vowel as the last segment of the syllable preceding it. Nouns ending in -ma may refer to animate objects (including humans), inanimate objects or to abstract phenomena. Their referents can be masculine or feminine.

| náma | 'wife, daughter-in.law' | áma | 'mother' |
| :--- | :--- | :--- | :--- |
| tshéma | 'twins' | kúnma | 'thief' |
| ràma | 'goat' | khálma | 'kidney' |
| gjùma | 'sausage, intestine' | $t^{h}{ }^{\text {úrma }}$ | 'spoon' |
| òma | 'milk' | nìma | 'sun' |
| t'áma | 'famine' | tìma | 'odor'18 |

16 The velar nasals tend to be realized as dental nasals when they precede labials. However, in some cases, such as this, both the dental and the velar nasal options are permitted.
17 All instances of the latter have nasal consonants in my material.
18 It can be a pleasant or a non-pleasant odor.

Apart from this, disyllabic nouns may end in other consonants and vowels, too. At least some of them are historically compounds.

| zúpho | 'body' | sèptuy | 'food' |
| :--- | :--- | :--- | :--- |
| pèrak | 'a type of flat cap with precious stones' | kúfu | 'apple' |

### 3.2.1.3 Polysyllabic Nouns

This category has both animate and inanimate common nouns. It is very possible that at least some of these nouns are morphologically complex, i.e., compounds or derived nouns.

| néruma | 'pan' | gùtshiva | 'spine’ |
| :---: | :---: | :---: | :---: |
| khánqoma | 'witch, spirit' ${ }^{19}$ | nàktara | 'lizard' |
| $k^{\text {hímamo }}$ | 'woman' | $t^{\text {hipkja }}$ | 'shadow' |
| mòraymo | 'widow' | zèmbulin | 'world' |

### 3.2.1.4 Noun Types

As the examples below illustrate, there are no formal differences between (i) count and mass nouns, (ii) abstract and concrete nouns, (iii) animate, inanimate and human nouns and (iv) proper and common nouns. Mono- and disyllabic nouns with the same word-final vowels or consonants are found in all these noun types.
(i) Count nouns Mass nouns
évu 'breast' pú 'hair (body)'
lùk 'sheep' ndùk 'thunder'
$p^{h a ́ k ~ ' p i g ' ~ t h a ́ k ~ ' b l o o d ' ~}$
ràtfo 'horn’ lókfu 'dandruff'
(ii) Concrete nouns

| lák | 'eagle' | sùk | 'pain' |
| :--- | :--- | :--- | :--- |
| gítpa | 'calf of the leg' | tshikpa | 'anger' |
| tálak | 'utensil(s), equipment' | tàzak | 'envy, jealousy' |

[^38]| (iii) | Inanimate nouns | Animate nouns | Human nouns |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | fú: | 'paper' | lù: | 'lamb' | tú: | 'boy' |
|  | $t^{h} a ́ k p a$ | 'rope' | tákpa | 'quail, partridge' | mákpa | 'husband' |


| (iv) | Proper nouns | Common nouns |  |
| :--- | :--- | :--- | :--- |
|  | pú | 'a place name' | tú: |

### 3.2.1.5 Complex Nouns

Navakat also has complex nouns. Reduplication, although found in some cases, is not a productive process in Navakat.
$\begin{array}{llll}\text { ndàyday } & \text { 'lying down (position)' } & \text { mème } & \text { 'grandfather' } \\ \text { kírkir } & \text { 'standing position' } & \text { táktak } & \text { 'shelf' }\end{array}$

Compound nouns, on the other hand, are relatively frequent in Navakat.

```
Noun + sá 'land, place'
jàrsa 'summer residence' (jàr (ka) 'summer')
nàlsa 'bed' (nàl 'sleep')
tháksa 'toilet' (thák`defecate')
Noun + rá 'fence'
jákra 'stable for yaks' (ják 'yak')
lùkra 'stable for sheep' (lùk 'sheep')
tára 'stable without roof' (tá 'horse')
mík 'eye' + Noun
mikfel 'spectacles, glasses' (fél 'glass')
míklam 'dream' (làm 'path')
míkpu 'eyebrow' (pú 'hair (body)')
```

| Noun/Adjective + nbù 'insect' |  |
| :--- | :--- |
| sérnbu 'bee' | (sér 'yellow') |
| tóràbu 'spider' | (tóray 'net, web, ropeway') |

Some additional examples of compound nouns are:

| mánk ${ }^{\text {hap }}$ | 'hospital' | (mán 'medicine' | + $k^{h}$ ágba 'house') |
| :---: | :---: | :---: | :---: |
| tfákt ${ }^{\text {apap }}$ | 'fireplace' (made of iron) | (tfák 'iron' | + thápka 'oven') |
| tákthak | 'chain' | (tfák 'iron' | + thákpa 'rope') |

### 3.2.1.6 Suppletive Honorific Noun Stems

There are some nouns in Navakat which have distinct honorific and nonhonorific stems. For example,

## H form NH form

$\operatorname{sú\eta }(\mathrm{H}) \quad t i, t^{h} i \quad$ 'speech'
fàp káyba 'foot'

The honorific forms (nouns as well as verbs, see below) are used when the speaker wants to show his respect to the person $\mathrm{s} / \mathrm{he}$ is talking to or about. This may be due to the social status of that person or that the person is older than the speaker and the speaker wants to show respect to this person. The use of the honorific and non-honorific (or neutral) forms may also indicate the degree of formality or distance between the interlocutors. For example, if the speaker is meeting a person for the first time, $\mathrm{s} /$ he frequently uses the honorific form.

### 3.2.2 Number

A two-way number distinction is made in Navakat. The singular is zero-marked. Plural is marked by one of the following suffixes: -fak (and its allomorph -dzak), -vat or -ja. -fak occurs only in pronouns. For example, mà-fak [1SG-PL], khóv-fak $\sim k^{h o ́ o}-d z a k$ [2SG.H-PL] and $k^{h o ́-f a} k^{20}$ [3SG.nH-PL]. The plural markers -fak and -vat occur with their respective, restricted sets of nouns and/or pronouns; they are not interchangeable with each other (except for the 3SG.NH pronoun which can take both). The plural suffix - $j a$, on the other hand, occurs in a wide range
of contexts. It is the default plural marker on nouns. It may also be affixed to plural pronominal forms-apparently with no difference in meaning. ${ }^{21}$
(7) mà--fak(-ja) sèptuŋ sòe-van

1SG-PL-PL food eat.PST-PST.EGO
'We ate food.'
(8) $k^{h} o ́-v a t(-j a) \quad$ jiŋga=la pùt-số $(\eta)$

3SG.NH-PL-PL field=ALL go.PST-PST.VIS
'They went to the fields.'
(9) $k^{h} o ́-\int a k(-j a) \quad$ síku(l)=la pùt

3SG.NH-PL-PL school=ALL go.PST
'They went to the school.'

The following examples illustrate $-j a$ as the plural marker on nouns.

| Noun (SG) |  | Noun-PL |  |
| :---: | :---: | :---: | :---: |
| là | 'mountain' | là-ja | [mountain-PL] |
| tiva | 'child' | tiva-ja | [child-PL] |
| $n_{z u ̀ n}{ }^{22}$ | 'finger' | $n_{z}$ ǜ:-ja $^{\text {a }}$ | [finger-PL] |
| mèndok | 'flower' | mèndok-ja | [flower-PL] |
| gèlzu: | 'livestock' | gèlzu:-ja | [animal-PL] |
| tứ, tú: ${ }^{\text {a }}$ | 'story' | tứ-ja | [story-PL] |

With coordinated nouns, the plural marker -ja normally occurs only onceafter the last noun. But, if asked, language consultants will provide a variant where the plural marker is suffixed to each coordinated noun.
(10) tú:=raך pòmo-ja
boy=COM girl-PL
'Boys along with girls' (Boys and girls)

21 When the plural marker $-j a$ is affixed to $-\int a k$ or to -vat, the articulation of $-k /-t$ in $-\int a k$ and -vat, respectively, becomes more audible.
22 [ ${ }^{n}$ zû̀ ].
(11) tú:-ja=raך pòmo-ja
boy-PL=COM girl-PL
'Boys along with girls' (Boys and girls)

Unlike Kinnauri (see Chapter 2), in Navakat the plural marker is not permitted with numerals.
(12) ràma súm
goat three
'Three goats'

### 3.2.3 Gender

Gender is not a grammatical category in Navakat. There are, however, some instances where the information about the natural gender of an animate referent is encoded linguistically, through word-formation devices. None of these processes are, however, productive.

In some cases the gender distinction is indicated by having separate lexical items. For example,

| Nouns (M) |  | Nouns (F) |  |
| :--- | :--- | :--- | :--- |
| mákpa | 'husband, son-in-law' |  | 'wife, daughter-in-law' |
| éu | 'paternal uncle' | áne | 'paternal uncle's wife, woman, <br> aunt' |
| jùksa | 'widower' | mòraymo | 'widow' |

In addition, as mentioned above, there are instances where nouns with female referents end in -mo. ${ }^{23}$ The corresponding nouns with male referents have, at times, completely distinct lexical forms (e.g. tú: 'boy, son' vs. pòmo 'girl, daughter'), while in other cases, -mo is suffixed to the masculine form (e.g. zò 'blacksmith' vs. zòmo 'blacksmith's wife'). There are also nouns where the masculine form ends with a -po and the feminine form ends with a -mo (e.g. gètpo old man' vs. gènmo 'old woman'; tà̀vo 'rooster' vs. tfàmo 'hen').

[^39]| Noun (M) |  | Noun (F) |  |
| :--- | :--- | :--- | :--- |
| lá | 'male tantra performer' | lámo | 'female tantra performer' |
| zò | 'blacksmith' | zòmo | 'blacksmith's wife' |
| bàvu | 'teacher, male' | bàmo | 'teacher, female' |
| t'háo | 'nephew, grandson' | tshámo | 'niece, granddaughter' |
| tápo | 'stallion'24 | támo | 'mare' |
| gètpo | 'old man' | gènmo | 'old woman' |
| gjèlvo | 'king' | gjèlmo | 'queen' |

Further, $-p a$ and -ma/-mo, respectively, are sometimes suffixed in Navakat to place names to denote 'men' (or 'people' in general) and 'women' from this place. While this is a rather productive process in Navakat, it is not permitted with all place names (for example, with kinorr 'Kinnaur'). Further, while in some cases, the feminine marker -mo is affixed directly to the place name, in other cases, -ma/-mo is affixed to the masculine form, as shown in Table 29. In this table place names are shown both in their Navakat form (Heading "Place name") and how these villages are referred to officially (Heading "Official name"). The terms denoting 'Men (people) from this place', 'Women from this place' and the Navakat names for the languages spoken in this village are provided in subsequent columns in this table. The terms referring to 'men' (or more generally to 'people' from this place) are formed here (exception, kíno:ra) by affixing -pa (allomorphs $-p a,-b a /-v a)$ to the place names. In some cases the stem undergoes some changes. Finally, language names are formed similarly as compound nouns or possessive NPs. Possessive NPs are described in Section 3.2.4.4 (they are marked "[POss]" in the table). In the compound noun case, the first part (the place name) may appear in its uninflected form (marked "[-]" in the table), or in a form derived using a noun-forming suffix-sometimes the same suffix used for denoting inhabitants, sometimes another suffix (marked " $[\mathrm{N}>\mathrm{N}]$ " in the table).

[^40]table 29 Place names and nouns denoting inhabitants

| Place name | Official name | Men (people) from this place | Women from this place ${ }^{25}$ | Language of this place |
| :---: | :---: | :---: | :---: | :---: |
| tà: ${ }^{\text {a }}$ | Chango | tà: ${ }^{\text {a }}$ | tầybamo | tầngopakat [ $\mathrm{N}>\mathrm{N}$ ] |
| hày | Hango | hàmba | hàjbamo | hàjbakat [ $\mathrm{N}>\mathrm{N}$ ] |
| li, liju | Leo | liva | livamo | livakat [ $\mathrm{N}>\mathrm{N}$ ] |
| súmra | Sumra | súmrava | súmrama | súmrakat [-] |
| nàu | Nako | nàova, nàva | nàoma, nàma | nàvakat [ $\mathrm{N}>\mathrm{N}$ ] |
| mèlin | Maling | mèlinpa, mèlijã: | mèliyma | mèlijakat [ $\mathrm{N}>\mathrm{N}$ ] |
| sáygla | Sangla | sáyglakpa ${ }^{26}$ | sáyglakma | sáylajikat [poss] |
| píti | Spiti | pítija, pítiva ${ }^{27}$ | pítima | pítijakat [ $\mathrm{N}>\mathrm{N}$ ] |
| nàmgja | Namgya | nàmgja: | nàmgjamo | nàmgjakat [-] |
| kínorr | Kinnaur | kínorra | kínorra, kínorri | kino:rikat[POss] |

### 3.2.4 Case

The Navakat case markers are phrasal enclitics (see Table 3o), i.e., they typically come at the end of an NP, after any adjectives and numerals which follow the noun. The comitative marker can also appear after other kinds of phrases when used in a coordinating function.

### 3.2.4.1 Nominative

The nominative form is the stem of a noun or a pronoun without any other case suffixes.

### 3.2.4.2 Ergative

The case marker =su functions as an ergative marker. It occurs with all persons and numbers as well as in all tenses. As the following examples show, the ergative marker occurs in transitive clauses. ${ }^{28}$

[^41]table 30 Case markers in Navakat

| Case | Case marker(s) |
| :--- | :--- |
| Nominative | $\emptyset$ |
| Ergative | $=s u$ |
| Dative/allative | $=l a$ |
| Possessive | $=k i,=i /=j i$ |
| Locative | $=n a$ |
| Terminative | $=r u$ |
| Ablative | $=n a s u$ |
| Instrumental/comitative | $=r a \eta$ |
|  |  |

(13) $m a ̀=s u \quad m a ̀-r a \eta=l a \quad t a ́ e$

ISG=ERG 1SG-REFL=DAT observe.PST
'I observed myself.'
(14) $k^{h o ́ \eta=s u ~ k u ́ n m a=l a ~ z u ̀ m b-a ̃: k ~}$

2SG.H=ERG thief=DAT catch-PST.FACT
'You caught a thief.' (Indirect knowledge)
(15) pìa-ja=su nà̀e mànbo sòe-tãy ndùk
rat-PL=ERG grain much eat.PST-HI AUX.NFUT.vis
'Rats have eaten a lot of grains.' (Direct knowledge)
(16) áŋmo=su kúnma=la zùmb-ã:k
i.name=ERG thief=DAT catch-PST.FACT
'Angmo caught the thief.' (Indirect knowledge)
The following examples show that the ergative marker does not obligatorily occur in all transitive clauses.
(17) mà kháyba tík zòe-van

1SG house one build.PST-PST.EGO
'I built a house.'
(18) khó $\quad k^{h o ́ y=l a ~ t a ́-a ̃: k ~}$

3SG.NH 2SG.H=DAT observe-PST.FACT
'He observed you.' (Indirect knowledge)
(19) ténzin dì=raŋ kúfu tá-kã:k
i.name knife=Ins apple cut-nPst.fact
'Tenzin will cut the apple with a knife.'
=su does not usually have an instrumental function. In such cases, normally the instrumental/comitative case marker =day occurs. However, =su occurs in some constructions where it might be considered as having a 'cause' or a 'reason' interpretation.
(20) ngò sùk=su ma-nàl-dza
head pain=INS NEG-sleep-INF
'Because of headache, I did not sleep.'
(21) sèptuŋ fimbo=su nzù:n síg ndàk-tãy
food good=Ins finger all lick-HI
'The food was so tasty that I have licked all (my) fingers.'
In the following example the case marker $=s u$ is affixed to the weather phenomenon. The verb has the typical agentive verb inflectional ending (see Section 4).

```
(22) ùrjuk=su n}dày páy tfák-tãy ndùk
    storm=erg yesterday tree break-Hi cop.NFUt.vis
    'Yesterday the storm has broken the tree.' (Direct knowledge)
```


### 3.2.4.3 Dative/Allative

The case marker =la functions as the dative marker as well as the allative marker. It occurs with all numbers and persons.

### 3.2.4.3.1 $\quad$ Dative $^{29}$

In the following example, =la functions as an indirect object marker.
(23) ít gàdi mà=la ázi=su táy-tfuy
DEM.PROX watch
1SG=DAT
o.sister=ERG leave-PST.ENA
'(My) older sister gave this watch to me.'

[^42]The following examples illustrate $=l a$ occurring with a direct object.
(24) $k^{h} o ́(=s u) \quad k^{h o ́}=l a \quad t o ́-a ̃: k$

3SG.NH(=ERG) 2SG.H=DAT see.PST-PST.FACT
'He looked at you.' (Indirect knowledge)
(25) $\eta a ̀=j i \quad t^{h} a ́ m o=l a ~ s u ́=s u \quad d u ̀ \eta-a ̃: k$
$1 S G=$ POSS niece=DAT who=ERG beat-PST.FACT
'Who beat (past) my niece?' (Indirect knowledge)
(26) $k^{h} o ́-v a t \quad k^{h o ́ v=i ~} \quad s^{h} a ́ m o=l a ~ t^{h} u ́ k-a ̃: k$

3SG.NH-PL 3SG.NH=POSS niece=DAT meet-PST.FACT
'They met his/her niece.' (Indirect knowledge)

The direct object may take $=l a$, also in constructions where the subject has the ergative marker. For example,
(27) giatsó=sú $k^{h} a ́ \eta b a=l a \quad$ tó-ã:k
i.name=ERG house=DAT see.PST-PST.FACT
'Giatso looked at the house.'

The dative marker also occurs in the reflexive construction.
$k^{h} o ́=s u \quad k^{h o ́}-r a \eta=l a \quad$ sát-ã:k
3SG.NH=ERG 3SG.NH-REFL=DAT kill-PST.FACT
'He killed himself.' (Background: The speaker knows that this has happened, but he did not see this himself.)
(29) $k^{h} o ́=s u \quad k^{h o ́}-r a \eta=l a \quad$ tát-ã:k

3SG.NH=ERG 3SG.NH-REFL=DAT break-PST.FACT
'He cut himself.'

$$
\begin{array}{lll}
\text { (30) } k^{h} o ́=s u & k^{h} o ́-r a y=l a & \text { túi-vã:k } \\
\text { 3SG.NH=ERG } & \text { 3SG.NH-REFL=DAT } & \text { wash-PST.FACT } \\
\text { 'He washed himself.' }
\end{array}
$$

The dative marker also occurs in the experiencer subject construction and the related possessive construction (see Section 5.1).

Additionally, it also functions as a subordinator, where it is suffixed to the non-final verb. The non-final verb has either a bare verb form or it has an infinitive form. The non-final clause, in such cases, has a purposive interpretation.
(31) dùa=raŋ tàk síg $k^{h} a ́ \eta b a ~ z o ̀-c ̧ a=l a ~ t a ́ k-t a ̃ y ~ n d u ̀ k ~$ stone=ins rock all house make-Inf=dat break-hi cop.fut.vis
'All the stones and rocks have been broken to construct houses.' (Direct knowledge)

### 3.2.4.3.2 Allative

In addition to its use as a grammatical case, =la also functions as a local case marker, denoting the allative (which is also used in an adessive function, i.e., denoting position rather than direction; cf. examples 33-35).
(32) mà rèl $\eta a ́ n-f o=l a \quad$ fú-ḑa fímla=la pùt ISG train early-CMP=DAT get.into-INF p.name=all go.pst 'I went with the earliest train to Shimla.'
(33) tsá:npho=ki thà=la sá yónpo ${ }^{30}$ ké: dèt-uk river=Poss shore=ALl grass blue grow aux-NFUT 'The green grass has grown on the shore of the river.' (Direct knowledge)
(34) kino:r=ki làm=la bàmzar màgbo ò-kã:k
p.name=Poss path=ALL waterfall many COP-nPST.FACT
'There are many waterfalls on the way to Kinnaur.' (Indirect knowledge)
(35) $k^{h} o f f=i \quad$ tú: jòk=la ${ }^{31}$ láp-kã:k
$3^{\text {PLL.NH }}=$ POSS son city=ALL study-NPST.FACT
'Their son studies in the city.' (Indirect knowledge)

### 3.2.4.4 Possessive

The possessive markers are $=k i$ (allomorph $=g i$ when preceded by a voiced consonant/vowel) and $=i /=j i$. Their distribution is not phonologically determined. There are instances where the same noun occurs with two different possessive markers.

```
dòrze=ji~dòrze=ki [i.name=POss] pàla\eta=i~pàla\eta=ki [cow=POss]
jùl=i~jùl=ki [village=Poss] évi=ji~évi=ki [grandmother=POSs]
rìja=ji~rìja=ki [forest=POSs] gètpo-ji~gètpo=ki [old man=Poss]
jào=ji~jào=ki [friend=POSs] dòlma=ji~ dòlma=i [i.name=POSs]
```

[^43]With the pronouns (including the demonstratives), however, only the possessive marker $=i /=j i$ occurs.

|  | Singular | Plural |
| :---: | :---: | :---: |
| 1-POSS | $\eta \grave{a}=j i, m \grave{a}=j i$ | $m a ̀ f a k=i, m \grave{a}=i^{32}(1 \mathrm{PLE}), \grave{o}=j i(1 \mathrm{PLI})$ |
| 2NH-POSS | $k^{h} j \dot{\text { gr }}=j i$ | $k^{h}$ óvat $=i, k^{h} o ́ f a k=i$ |
| 2H-POSS | $k^{h} o ́ y=i$ | $k^{h}$ óךfak=i, $k^{h}$ óvdzak=i, ${ }^{h}$ óvdz=i |
| 3NH-POSS | $k^{h} \delta^{\prime}=j i, i z$ | $k^{h} o \delta f a k=i, k^{h} \delta ¢=i^{33}$ |

(36) $k^{h o ́}=j i \quad$ péraŋ $\operatorname{sí\eta }=g i \quad$ kápba izuk rìppo ò-kã:k 3SG.NH=POSS family all=poss leg like.this long COP-NPST.FACT 'In their family everybody's legs are long like this.'

### 3.2.4.5 Locative

The case marker $=n a$ indicates location.
(37) $m a ̀=j i \quad j u ̀ l=n a \quad$ nirij mànbo mèt
$1 S G=$ POSS village $=$ LOC relatives many NEG.EXIST
'I don't have many relatives in the village.'
(38) nàu=na mi màjbo mè-kãak
p.name=LOC man much NEG.COP-NPST.FACT
'There are not many people in Nako.'

The locative case marker also functions as a subordinator.
(39) gùnga $k^{h a ́ l v a=k i ~ f a ́ ~ s a ̀-d z a=n a ~ z u ́ p h o ~ t o ̀ n m o ~ d e ̀-k a ̃: k ~}$ winter ram=POSS meat eat-INF=LOC body warm COP-NPST.FACT 'Eating ram meat in winter keeps the body warm.' (Indirect knowledge)

### 3.2.4.6 Terminative

The terminative marker $=r u$ has the following allomorphs: $=r u,=t u$ and $=^{n} d u$. All instances of the allomorph $=r u$ in the dataset occur with stems ending in

[^44]vowels; $=t u$ and $={ }^{n} d u$ occur with stems ending in consonants. ${ }^{34}$ Like the allative marker (see Section 3.2.4.3.2), the terminative is used to express position in addition to direction (42).
(40) $m a ̀=j i \quad k a ́ \eta t s^{h} i v a=r u$ dùa $p^{h} o ́ k-t f u ̈ \eta$

1SG=POSS ankle=TERM stone hit-PST.ENA
'A stone has hit my ankle.'
(41) píti=ki tsá:npho ${ }^{h} k^{h} a ́ p=t u$ sátlud3 tsá:np ${ }^{h} O=r u{ }^{n} d e ̀:$
p.name=poss river p.name=TERM river.name river=TERM merge
${ }^{n}$ dò-vã:k
go.nPST-PST.FACT
'The Spiti river merges into the Satluj river at Khab.' (Indirect knowledge)
(42) $\eta a ̀ ~ j u ̀ l=d u \quad d e ̀-k a n$

1SG village=TERM COP-FUT.EGO
'I will be in the village.'
(43) nàu=ru kjǿt sèr-ak
p.name=TERM come.ImP say-AUDITORY.EVIDENTIAL
'(They) say: "Come to Nako!"'

### 3.2.4.7 Ablative

The ablative marker is =nasu, possibly representing a combination of locative $=n a$ and ergative $=s u$.
(44) sémba=nasu khó mi ètpo ò-kã:k
heart=ABL $\quad$ 3SG.NH man good COP-NPST.FACT
'He is a good man at heart.' (Indirect knowledge)
(45) píti lùyba=nasu tshóyba ní: léb dèt-ok
p.name valley=ABL trader two arrive(H) AUX-NFUT.VIS
'Two traders have arrived from the Spiti valley (and they are still here).' (Direct knowledge)

```
(46) \({ }^{n}\) dà \(=n a s u \quad m a ̀=j i ~ k u ̀ \eta ~ s u ̀ k ~ t a ̀ k ~\)
yesterday=ABL 1SG=POSS back pain COP.NFUT.NVIS
'Since yesterday my back has pain.' (Since yesterday I have back pain.)
```

(47) $m a ̀=j i \quad a ́ n e=k i \quad m i ́ k=n a s u ~ s i ́ r i s a k ~ t h u ́ u ~ t o ̀ ̀ ~$
$1 \mathrm{SG}=\mathrm{POSS}$ p.aunt=POSS eye=ABL often water come.out
${ }^{n} d u ̀ k$
COP.NFUT.VIS
'From my aunt's eyes water often flows.' (Direct knowledge)

### 3.2.4.8 Instrumental/Comitative

=ray functions as the instrumental and the comitative (or associative) marker. It has three allomorphs: $=d a \eta,=\operatorname{ta\eta }$ and $=r a \eta .{ }^{35}=d a \eta$ occurs when the preceding noun ends with a voiced consonant; =tay occurs when the preceding noun ends in a voiceless consonant and =ray occurs when the preceding noun ends with a vowel.
(48) ténzin=su dùa=raך ndàmbak=taך khánba zòe-vã:(k) i.name $=$ ERG stone $=$ INS mud=INS house build.PST-PST.FACT 'Tenzin built the house with stone and mud.' (Indirect knowledge)
(49) $k^{h o ́=s u ~ t i ́ \eta b a=r a \eta ~ s a ́ z a ~ k o ́ e ~}$ 3SG.NH=ERG heel=INS surface dig.PST
'He dug a hole with (his) heel.'

The case marker =ray also functions as the comitative (or associative) marker, with a 'together with, along with' interpretation. The distribution of its allomorphs =taŋ, =day and =raך here is the same as described above for the instrumental.
(50) giatsó=raך giatsó=ji péraך ò $\eta-k a ̃: k$
i.name=INS i.name=POSS family come-NPST.FACT
'Giatso along with his family will come.'

```
(51) tánzin \(k^{h} o ́=j i \quad\) ázo=raŋ \({ }^{36}\) námbo dilli=la
    i.name 3 SG.NH=POSS o.brother=INS together p.name=ALL
    pùt-ã:(k)
    go.PST-PST.FACT
    'Tenzin went to Delhi along with his brother.' (Indirect knowledge)
```

(52) ràm=daŋ tánzin nól số $(\eta)$
i.name=INS i.name fight PST.VIS
'Tenzin fought with Ram.' (Direct knowledge)

## $3 \cdot 3$ <br> Pronouns

3.3.1 Demonstrative Pronouns

The demonstrative pronouns in Navakat are $i_{i}^{\prime}, p^{h} \imath_{:}^{\prime}$ and $\grave{o} t i$. Their distribution is as follows. íc occurs when the object is in close proximity to the speaker; $p^{h}{ }_{i}^{\prime}$ occurs when an object is not in close proximity to the interlocutors, but they can see it; òti is used to refer to an object which the interlocutors have seen before, but which may or may not be visible to them at the time of speaking. It seems to have the discourse interpretation 'this/these very thing(s)/person(s)'.

As mentioned already, the demonstrative pronouns are placed before their head noun, and remain invariant to the number and gender of the head noun.

| í: mi | 'this man' | í: mi-ja | 'these men' |
| :---: | :---: | :---: | :---: |
| i: pòmo | 'this woman' | í: pòmo-ja | 'these women' |
| í: $k^{h} a ́ y b a$ | 'this house' | í: $k^{h} a ́ \eta b a-j a$ | 'these houses' |
| í tá | 'this horse' | í: tá-ja | 'these horses' |
| $p^{h}$ í: $k^{h} a ́ y b a$ | 'that house' | $p^{h}$ í: $k^{h} a ́ \eta b a-j a$ | 'those houses' |
| $p^{\text {hílí pòmo }}$ | 'that woman' | $p^{\text {hí: pòmo-ja }}$ | 'those women' |
| $p^{h i}$ í tá | 'that horse' | $p^{h}$ í: tá-ja | 'those horses' |
| òti pòmo | 'that woman' | òti pòmo-ja | 'those women' |
| òti mi | 'that man' | òti mi-ja | 'those men' |
| òti tá | 'that horse' | òti tà-ja | 'those horses' |
| òti $\mathrm{K}^{h} a ́ \eta b a$ | 'that house' | òti khágba-ja | 'those houses' |

36 atfo 'older brother' does not occur in Nàvakat, but it occurs in neighboring villages such as Dubling, Khab and Nyamgya.

### 3.3.2 Personal Pronouns

|  | SG | PL |
| :---: | :---: | :---: |
| 1 | $m a ̀$, $\quad$ à | màfak (1PLE), nèt (1PLE) |
| 1PLI |  | òn |
| 2H | $k^{h} o ́ \eta$ | $k^{h}$ ónfak, $k^{h o ́ \eta d z a k ~}$ |
| 2 NH | $k^{h} j \underline{t}$ | $k^{h} j$ ¢́tvat |
| 3H | $k^{h} o ́ \eta$ | $k^{h}$ ónfak, $k^{h}$ óndzak |
| 3NH | $k^{h o ́}$ | $k^{h}$ ófak, $k^{h}$ óvat |

The distribution of the first person singular pronouns mà and $\eta a ̀$ is pragmatically conditioned. In everyday situations, mà is used by the younger participants in a conversation to refer to himself/herself, as a symbol of respect towards the other participant(s). ${ }^{37}$ The older participant, on the other hand, uses $\eta a ̀$ while talking about himself/herself in the same conversation. Friends normally use $\eta \grave{a}$ irrespective of their age. In a conversation between a layman and a lama, the lama normally uses $\eta a ̀$ to refer to himself/herself, while the layman (irrespective of his/her age) uses mà to refer to himself/herself. In situations where the participants do not know each other too well, thus they don't know what social role they have in the conversation, mà is normally used by the participants to refer to themselves as a precautionary measure.

These pragmatic factors are also relevant in the distribution of the first person exclusive plural pronoun (màjak and jèt) and the third person pronouns ( $k^{h} o ́$ and $k^{h} o ́ \eta$ ). Between the two 1PLE pronouns nèt occurs in situations corresponding to 1SG $\eta a ̀$ and $m a ̀ f a k$ occurs in situations corresponding to 1SG $m a ̀$. Similarly, in the third person, $k^{h o ́ \eta}$ (which otherwise occurs as the 2 SG.H pronoun) occurs where the speaker wants to pay respect to the listener; $k^{h}$ ó occurs elsewhere. ${ }^{38}$

Unlike Kinnauri (see Chapter 2), the same pronominal form occurs in nominative and non-nominative positions in Navakat.

37 It is very likely that mà means 'low' and, thus, a way to indicate humility.
38 In Classical and Lhasa Tibetan, too, khong functions as a third person honorific pronoun (DeLancey 2017a, 2017b).

|  | Possessive | Dative/allative |
| :---: | :---: | :---: |
| 1SG | $m \grave{a}=i$ | $m \grave{a}=l a$ |
| 2SG.H | $k^{h} o ́ y=i$ | $k^{h} o ́ \eta=l a$ |
| 2SG.NH | $k^{h j o ́ t=i}$ | $k^{h}{ }^{\text {jót }}=1 a$ |
| 3SG.H | $k^{h} o ́ \eta=i$ | $k^{h} o ́ y=l a$ |
| 3SG.NH | $k^{h} \delta \underline{o}=i, l^{\prime}=i$ | $k^{h} o ́=l a, ~ i ́ e=l a ~$ |
| 1PLE | mà $\int a k=i, m a ̀ f=i$ | màfak=la |
| 2 PL .H | $k^{h}$ ónfa $k=i, k^{h}$ óvḑak $=i, k^{h}$ óvdz $=i$ | $k^{h}$ ónfak=la, $k^{h}$ óndz $a k=l a$ |
| 3PL.NH | $k^{h} 0$ fak $=i, k^{h} 0$ Ó=i | $k^{h} 0$ fa $k=l a$ |

3.3.3 Interrogative Pronouns and Adverbs

Some interrogative pronouns and adverbs in Navakat are as follows.

| tsúk | 'how' | $k a ̀ n d u$ | 'where (specific location)' |
| :--- | :--- | :--- | :--- |
| tsám | 'how much, how many' | kàna | 'where (non-specific location)' |
| t'í | 'what' | kà $(t e)$ | 'which' |
| nàm | 'when' | sú | 'who' |

The interrogative pronouns occur with animate (including, human) as well as inanimate arguments, with singular as well as plural arguments. See Section 5.2 for the structure of WH-questions.
3.3.4 Reflexive Pronouns

Reflexive pronouns are formed by suffixing -ray to the pronoun.
(53) $k^{h}$ ó $\quad k^{h} o ́ y=l a \quad$ táe-vã:k

3SG.NH 2SG.H=DAT observe.PST-PST.FACT
'He observed you.' (Indirect knowledge)
(54) $k^{h} o ́=s u \quad k^{h} o ́-r a \eta=l a^{39} \quad$ táe-vã:k

3SG.NH=ERG 3SG.NH-REFL=DAT observe.PST-PST.FACT
'He observed himself.' (Indirect knowledge)

(55) $m a ̀=s u \quad m a ̀-r a \eta=l a \quad t a ́ e$

1SG=ERG ISG-REFL=DAT observe.PST
'I observed myself.'
(56) mà $a k=s u$ mà $a k-r a \eta=l a ~ t a ́ e ~$

1PLE=ERG 1PLE-REFL=DAT observe.PST
'We observed ourselves.'
(57) khóy=su $k^{h} o ́ \eta-r a \eta=l a \quad t a ́ e-v a ̃: k$

2SG.H=ERG 2SG.H-REFL=DAT observe.PST-PST.FACT
'You observed yourself.' (Indirect knowledge)
(58) khóvat=su khóvat-ray=la táe-vã:k

3PL.NH=ERG 3PL.NH-REFL=DAT observe.PST-PST.FACT 'They observed themselves.' (Indirect knowledge)

In fast speech, the reflexive marker -ray is, at times, realized as -re.
(59) tiva-ja $k^{h o ́ f a k-r e ~ a ́ z a ŋ=l a ~} t^{h} u ́ k-p a ̃:(k)$
child-PL 3PL.NH-REFL uncle=DAT meet-PST.FACT
'The children met their (own) uncle.' (Indirect knowledge)
(6o) tiva-ja=su $k^{h} o ́ f a k-r e=l a \quad$ táe-vã:k
child-PL=ERG 3PL.NH-REFL=DAT observe.PST-PST.FACT
'The children observed themselves.' (Indirect knowledge)

### 3.3.5 Reciprocal Pronoun

An invariant form tík+tay+tík [one+Com+one] 'each other' occurs in the reciprocal construction.
(61) màfak-ja tiktaŋtyik=la táe-van

1PLE-PL each.other=DAT observe.PST-PST.EGO
'We observed each other.'
(62) òn-ja ťiktantîk=la táe-van

1PLI-PL each.other=DAT observe.PST-PST.EGO
'We observed one another.'
(63) khóŋdzak=su tfiktaŋtŷk=la táe-vã:k

2H.PL=ERG each.other=DAT observe.PST-PST.FACT
'You (PL) observed one another.' (Indirect knowledge)
(64) tú:=raך pòmo tíktaŋtîk=la táe-vã:k
boy=COM girl each.other=DAT observe.PST-PST.FACT
'The boy and the girl observed each other.' (Indirect knowledge)
(65) khóvat=su tîktantîk=la táe-vã:k

3PL.nH=ERG each.other=DAT observe.Pst-PST.FACT
'They observed one another.' (Indirect knowledge)

### 3.4 Adjectives

Adjectives in Navakat follow their head nouns. In case the adjective has an adverbial modifier, such as an intensifer (e.g. ndji:ja 'much'), this precedes the adjective ( N Adv Adj; see example 63 below). Coordinated adjectival phrases (Adj=com Adj) go into the same slot as simple adjectives, i.e., they follow their head nouns (see example 64 below).

| táao ${ }^{40}$ | [book thin] | ${ }^{\prime}$ |
| :---: | :---: | :---: |
| $t^{\text {h }}$ óóopto ${ }^{41}$ | [lake deep] | eep lake' |
| pòmo thámo | [girl thin] | in girl' |
| mi dùmpo | [man fat] | 'fat man' |
| solok thánbo | [road straight] | 'straight r |

(66) $k^{h} o ́=j i \quad$ té $\quad$ ni ${ }^{n} d j \check{i}: \int a$ riypo ${ }^{n} d u ̀ k$

3SG.NH=Poss tongue emp much long cop.nfut.vis
'His tongue is very long.' (Direct knowledge)
(67) í: $\quad k^{h a ́ g b a ~ n i ́ p b a=r a \eta ~ m a ́ r v o ~ n a ́ m b o ~ m a ̀=j i ~}$
dem.prox house old(NHUM)=COM red together 1SG=Poss
ázo jòe-vãk
o.brother buy.PST-PST.FACT
'My older brother bought this old, red house.' (Indirect knowledge)
Adjectives do not inflect in Navakat. In examples (68-69) below the same adjectival form (dùmpo 'thick, fat (round objects)') occurs with nouns denoting both males and females. Examples (70-71) show that adjectives do not inflect for number.

[^45](68) mi dùmpo
man fat
'Fat man'
(69) pòmo dùmpo
woman fat
'Fat woman'
(70) tfiva kítpu
child happy
'Happy child'
(71) tiva-ja kítpu
child-pl happy
'Happy children'

### 3.4.1 Adjective Structure

Adjectives in Navakat are mono- or disyllabic. With a few exceptions, monosyllabic adjectives end either in nasals ( $m, n$, or $\eta$ ) or in vowels.

| fàu | 'lame' | tshéu | 'salty' |
| :--- | :--- | :--- | :--- |
| yán | 'early' | tún | 'short' |
| tyyn, tfún | 'small (non-long objects)' | tyóm | 'ready' |
| fà̀ | 'wide' | kól | 'deaf; mute' |

As with nouns, disyllabic adjectives, too, frequently end in $-p o,-p a,{ }^{42}-m o$ or $-m a$. However, the largest group of adjectives end in -po. There is no clear distinguishing factor determining the distribution of the various adjectival endings.

| thúkpo | 'rich' | kámpo | 'dry' |
| :--- | :--- | :--- | :--- |
| fímbo | 'good (edibles)' | tà̀bo | 'true, honest' |
| nbòlmo | 'soft' | k'émo | 'cheap' |
| sóma | 'new' | nérma | 'wrinkled' |
| nínba | 'old (NHUM)' | ritpa | 'weak' |

42 As was the case with nouns, $-p o$ and $-p a$ are sometimes realized as $-b o /-v o$ and $-b a /-v a$, respectively.

As was the case with nouns, disyllabic adjectives, too, may end in other vowels or consonants.

| $\left.{ }^{( }{ }^{n}\right)$ ḑéyu | 'green' | kà:po | 'difficult' |
| :--- | :--- | :--- | :--- |
| $\left(^{n}\right)$ bà: $p^{h} a$ | 'dirty' | gùrkøk | 'crooked' |
| t'ínte | 'heavy' | lánte | 'wet' |
| gìrgir ${ }^{43}$ | 'round (large objects)' | nèzuŋ | 'young (HUM)' |

Descriptive adjectives are classified according to whether they refer to, for example, age, dimension, value or color. The following are some examples of descriptive adjectives.

Age
nèzuy 'young(HUM)' nérma 'wrinkled'
dàmbo 'old (time)' gètpo 'old (ANIM)'
(72) $k^{h} o ́=j i \quad$ tá gètpo $\int i-s-a ̃: k$

3sg.nH=POSs horse old(ANIM) die-MDL-PST.FACT
'His old horse died.' (Indirect knowledge)

Dimension
dùmpo 'thick (round)' $t^{h}$ úpo 'thick (non-round objects)'
$t^{h a ́ m o ~ ' t h i n ~(r o u n d ~ o b j e c t s) ' ~ t a ́ p o ~ ' t h i n ~(o b j e c t s ~ w i t h ~ s u r f a c e) ' ~}$
rìpo 'long, tall' $t^{h}$ hétpo 'big'
tòkpo 'narrow' tháybo 'straight'

```
(73) \(k^{h o ́}=j i \quad\) tá rìppo=raך nàkpo ndùk 3sg.NH=POSs hair long=COM black cop.NFUT.vis 'Her hair is long and black.' (Direct knowledge)
```

Value
ètpo 'good (ANIM)' fímbo 'delicious (eatables)'
dèmo 'good (external qualities)' zàjbo 'good (internal qualities)'
knámloktfa 'bad (disgusting)' $\quad$ jànba 'bad'

[^46]| tú: ètpo | [boy good] | 'good boy' |
| :--- | :--- | :--- |
| tú: dèmo | [boy good (exterior)] | 'handsome boy' |
| kátfa dèmo | [news/rumour good] $]$ | 'good news' |
| sèptuך fímbo | [food delicious] | 'delicious food' |
| námla Đànba | [weather bad] | 'bad weather' |
| kátfa jànba | [news/rumour bad] | 'bad news' |
| tiva-ja jànba | [child-pl bad] | 'bad children' |
| tú: jànba | [boy bad] | 'bad boy' |

Most color terms in Navakat end in -po (allomorphs -po, -bo/vo).

Color

| kárvo | 'white' | Øónpo, ŋǿnpo | 'blue' |
| :--- | :--- | :--- | :--- |
| nàkpo | 'black' | sér $(v o)$ | 'yellow' |
| márvo | 'red' | $\left({ }^{n}\right) d$ द́jé $u$ | 'green' |

Properties relating to physical characteristics, personality traits and speed are also expressed by adjectives in Navakat.

Physical characteristics

| kjòjbo | 'hard' | dùmpa | 'blunt' |
| :--- | :--- | :--- | :--- |
| nbòlmo | 'soft' | t'ínte | 'heavy' |
| nònpo | 'sharp' | jàjmo | 'light' |
| kámpo | 'dry' | lánte | 'wet' |

sáza ${ }^{n} b o ̀ l m o{ }^{44} \quad$ [land soft] 'soft surface'
sáza kjò̀bo [land hard] 'hard surface'

Personality traits
gèri 'happy, proud' táybo 'clever'

Speed
yán 'early' ${ }^{n}$ gjòp ${ }^{h} a^{45}$ 'fast'
tín,tín 'late' gùlejray 'slow'

[^47](74) mà rèl tín-fo fú-dja fimla=la pùt

1SG train after-CMP get.into-INF p.name=ALL go.PST
'I went with the earliest train to Shimla.'
(75) mà rèl ŋán-fo=la fú-dja fímla=la pùt

1SG train early-CMP=DAT get.into-INF p.name=all go.PST
'I went with the earliest train to Shimla.'

Non-numeral quantifier adjectives
jòp 'many (CNT)' màbbo 'many (NCNT)'
kónbo 'few' tám 'approximately'
At times, when the speaker either does not need to or want to specify the exact amount, mà bbo 'many' occurs even with countable objects (77).
(76) tà lò thấrva màybo gjè $(p)$ ma-zố $(\eta)^{46}$ now year rain many shoot NEG-PST.VIS
'This year it didn't rain much.'
(77) òti lò séngul=su knápba mànbo dip số( $\eta$ ) that year earthquake=ins house many fell.down pst.vis 'That year the earthquake destroyed many houses.' (Direct knowledge)
màgbo 'many' also functions as an adverb.
(78) bàs=ki này=du mànbo dè-ffa tónto sùk tàk bus=poss inside=Loc many sit-INF buttock pain cop.nfut.nvis '(My) buttock is aching because of (my) sitting in the bus for a long time.'

### 3.4.2 Degrees of Comparison

The superlative is formed by suffixing $-\int 0$ to an adjective. If the stem is a disyllabic stem, the final syllable is deleted in the process.
tfún-fo 'smallest' <tfún 'small (objects which are not elongated)'
tín-fo 'very late' <tím, tíly 'late'
màn-fo 'most' <màgbo 'many(NCNT)'
$46 \quad-s o \tilde{( }(\eta)$ is realized as [ $30 \tilde{( }(\eta)]$ here.

In the contrastive construction (also called "comparative construction") s $\tilde{a}:{ }^{47}$ occurs between the objects which are being compared.
(79) rìa=ki kúfu sã: tsháera-i kúfu fim-kã:k forest=poss apple CONT orchard-poss apple tasty-nPst.FACT
'Orchard apples are sweeter than wild apples.' (Indirect knowledge)
(80) ténzin sã: dòrze rì -ã:k
i.name CONT i.name tall-NPST.FACT
'Tenzin is taller than Dorje.' (Indirect knowledge)
(81) í: $\quad k^{h} a ́ \eta b a ~ s a ̃: \quad p^{h}$ í: $^{2}$ khágba nìpba jin-uk
this house cont that house old(NHUM) COP-NFUT.VIS
'This house is older than that house.' (Direct knowledge)

### 3.5 Numerals

Like adjectives, numerals in Navakat come after the head noun. Any adjectives are placed between the noun and the numeral. Numerals can be suffixed with $-b o$, marking the NP as given information.
(82) ràma súm
goat three
'Three goats'
(83) $k^{h a ́ \eta b a ~ n i ̀ \eta b a=r a \eta ~ m a ́ r v o ~ s u ́ m ~ m a ̀=i ~ a ́ z o ~}$
house $\operatorname{old}($ NHUM $)=$ COM red three $1 S G=$ poss obrother
nòe-vã: $k^{48}$
buy.PST-PST.FACT
My older brother bought three old red houses.
(84) $k^{h} a ́ \eta b a ~ n i ̀ \eta b a=r a \eta ~ m a ́ r v o ~ s u ́ m=b o ~ m a ̀=i ~ a ́ z o ~$
house old(NHUM)=COM red three-GIVEN 1 SG=POSS o.brother nòe-vã:k
buy.PST-PST.FACT
My older brother bought the three old red houses.

[^48]The numerals 1-10 are as follows.

| tík | 'one' | tùk | 'six' |
| :--- | :--- | :--- | :--- |
| níi | 'two' | dùn, dỳn | 'seven' |
| súm | 'three' | gjèt | 'eight' |
| 3ì | 'four' | gù | 'nine' |
| já | 'five' | tjú | 'ten' |

Navakat exhibits a consistent decimal system. See Chapter 5 for more information on Navakat numerals. As the following examples illustrate, several connecting morphemes (e.g. sok-, ${ }^{49} \eta a k$-) occur in higher numerals. These connecting morphemes are neither in free variation nor is their distribution phonologically determined. ${ }^{50}$

| nì:u | '20' | ni: | '2' | $\times$ | tuú | '10' |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| súmdzu | '30' | súm | '3' | $\times$ | tú | '10' |
| súndzu sokjík | '31' | súmdzu | '31' | sok- | tik | '1'51 |
| siptfu | '40' | $3 i$ | '4' | $\times$ | (p)tú | '10' |
| siptfu zakfik | '41' | siptu | '40' | zak- | tik | ' 1 |
| †éptfu ${ }^{52}$ | '50' | já | '5' | $\times$ | (p)tú | '10' |
| ךéptfu ךakjik | '51' | ŋéptfu | '50' | jak- | tik | ' 1 ' |
| tùktfu | '60' | tùk | '6' | $\times$ | tuú | '10' |
| tùktfu rakfik / *rokfik | '61' | tùktfu | '6o' | rak | tik | '1' |
| dùndzu | '70' | dùn | '7' | $\times$ | tjú | '10' |
| dùndzu tokjik / tonfik ${ }^{53}$ | '71' | dùndzu | '70' | tok-/ton- | tik | ' 1 ' |
| gèdzu, gèttfu | '80' | gèt | '8' | $\times$ | toú | '10' |
| gèdzu kakjik | '81' | gèdzu | '80' | kak- | tik | ' 1 ' |
| gòptfu | '90' | gù | '9' | $\times$ | (p)tú | '10' |
| gòptfu kokjik | '91' | gòptfu | '90' | kok- | tik | '1' |

[^49]
## 4 The Verb Complex

The verb complex in Nàvakat is considerably simpler than that of Kinnauri. There is no subject or object indexing, tense and evidentiality information is conveyed by combinations of lexical verbs, nominalizers, suffixes/clitics and auxiliaries.

### 4.1 Verb Lexemes and Their Structure

4.1.1 Simplex Verbs

The focus here is on simplex verbs. Below we give some examples of verbs of different semantic types, illustrating that there is no formal differentiation of these types. The verbs are provided here in their infinitive forms (ending either in -tfa or -dza). ${ }^{54}$

Involuntary processes
${ }^{n}$ dòdza 'to flow (NH)' zèttfa 'to forget'
tè $(t) t f a$ 'to drift (INTR)' fídza 'to die (NH)'
Bodily functions
kjúktfa 'to vomit' ndàrtfa 'to shiver'
jùdza 'to cry' gjùdza 'to have sex'
miktfa 'to swallow' ndàtfa 'to chew'

Motion verbs
${ }^{n}$ dòdga 'to go (NPST)' ${ }^{n} d z a ̀ k t f a \quad$ 'to climb'
òjdza 'to come' tándza 'to leave'
$p^{h} u$ ŕtfa 'to fly' $\quad y^{h} o ́ \eta d z a ~ ' t o ~ j u m p ' ~$

Action verbs

| tútfa | 'to wash' | kótfa | 'to dig' |
| :---: | :---: | :---: | :---: |
| kúvdza | 'to bury' | dàmdza | 'to tie' |
| ndàtfa | 'to chew' | zàydza | 'to build (H)' |

## Cognition verbs

féfa 'to know' zèttfa 'to forget'

54 Two types of variation are observed here. First, the infinitive marker - $d \xi a$ is also realized as - $z a$. Second, in many instances speakers use $-t f a$ and $-d z a$ with the same verb, seemingly in free variation.

Utterance verbs
sèrtfa 'to say', 'to tell' tídja 'to ask'

Focussed attention verbs
tádza 'to observe' númdza 'to smell (TR)'
4.1.2 Honorific and Non-Honorific Verb Stems

Some verbs in Navakat have distinct honorific and non-honorific verb stems.

|  | H verb form | NH verb form |
| :---: | :---: | :---: |
| 'to arrive' | $p^{h}$ étfa | léptfa |
| 'to go' | kjóttfa | ${ }^{\text {ndododza }}$ |
| 'to come' | $p^{h}$ étfa | òjdza |
| 'to be born' | $t^{\text {hú }}$ dza | kédza |
| 'to die' | tònfa | fidza |
| 'to drink' | $t^{\text {fóttfa }}$ | thújdza |
| 'to give' | púldza | tértfa |
| 'to know' | khéndza | féfa |
| 'to sit, to stay' | zù: $\int$ a | dètfa |

### 4.1.3 Complex Verbs

Navakat has a kind of light or support verb construction, consisting of a noun without case marking and a verb. In this construction, the noun carries the main semantic content and the verb functions primarily as the carrier of the verb inflectional morphology. Verbs which occur in this construction are: ò ${ }^{2} d z a$ 'to come', òtfa 'to exist', $g(j) e ̀ p t f a ~ ' t o ~ s h o o t ', ~ p e ̀ t f a ~ ' t o ~ d o ', ~ l e ̀ n d z a ~ ' t o ~ t a k e ', ~ t a ́ y d z a ~ ' t o ~$ send', and tértfa 'to give ( NH )'.

Complex verbs with òydza 'to come' describe non-voluntary situations.
tókri ò y -dza [hunger( N ) come-INF] 'to be hungry'
míklam ò $y-d z a \quad[\operatorname{dream}(\mathrm{~N})$ come-INF] 'to dream (NVOL)'
$t^{h} i: f a^{55}$ ò $\eta-d z a \quad[\operatorname{drip}(\mathrm{~N})$ come-INF] 'to drip, to dribble(INTR)'
tima ò $y-d \xi a \quad[\mathrm{smell}(\mathrm{N})$ come-INF] $\quad$ 'to smell (INTR)'

With the verb òtfa 'to exist', we get states.

| tfá ò-tfa | $[$ knowledge $(\mathrm{N})$ exist-INF] | 'to know about' |
| :--- | :--- | :--- |
| sónpo ò-tfa | $[$ alive $(\mathrm{N})$ exist-INF] | 'to be alive' |
| tórezik ò-tfa | $[$ resemblance $(\mathrm{N})$ exist-INF] | 'to seem similar' |

$g(j)$ èptfa 'to shoot' provides a volitional interpretation.
mónlam gjèp-tfa [pray(N) shoot-INF] 'to pray'
t'ík gjèp-tfa [word( N ) shoot-INF] 'to paint'
gùrma gjèp-tfa [crawl(N) shoot-INF] 'to crawl'

The verb pètfa 'to do' derives complex activity verbs. The activity can be abstract (e.g. 'to hope') or concrete (e.g. 'to perform a religious activity').
rèva pè-tfa [hope( N ) do-INF] 'to hope'
$t^{\text {h}}$ ǿe pè-tfa [religious.activities(N) do-INF] 'to preach'
jào pè-tfa [friend do-INF] 'to help'

All instances of complex verbs constructed with lènḑa ' to take' involve bodily actions.
ditpa lèn-dza [sneeze( N ) take-InF] 'to sneeze'
hùida lèn-dza [snore(N) take-INF] 'to snore'
jàl lèn-dza [yawn(N) take-INF] 'to yawn'
táydsa 'to send' and tértfa 'to give (NH)' both derive complex verbs which describe activities.

| lú tág-dza | [song( N ) send-inf] | sing' |
| :---: | :---: | :---: |
| kjákpa táy-dza | [feces( N ) send-INF] | 'to defecate' |
| $k^{\text {hirre: táy-dza }}$ | [hunting( N ) send-INF] | 'to hunt' |
| le: tér-t | [blessing( N ) give-INF] | 'to bless' |
| tèu tér-tfa | [permission( N ) give-INF] | to perm |

4.1.4 Intransitive, Transitive and Ditransitive Verbs

The direct object in transitive clauses may take the dative marker. Ditransitive verbs take three core arguments. As is the case with transitive verbs, even in this case, the direct object and the indirect object need not occur explicitly in the clause.
(85) nima fár-số $(\eta)$
sun rise-PST.VIS
'The sun rose.' (Direct knowledge)
(86) $k^{h o ́ f a k ~ f i ̄ ŋ ~ t ~ f a ́-s o ̂ ́(~} \eta$ )

3PL.NH wood break-Pst.VIS
'They cut the wood.' (Direct knowledge)
(87) áymo=su kúnma=la зùm-ã:k
i.name=ERG thief=DAT catch-PST.FACT
'Angmo caught the thief.' (Indirect knowledge)
(88) àymo=su ténzin=la múl tát-ã:k
i.name=ERG i.name=DAT money give.PST-PST.FACT
'Ram gave (some) money to Tenzin.' (Indirect knowledge)

### 4.2 Verbal Inflectional Categories

Navakat verbs do not exhibit subject or object indexing, but like most other Tibetic languages, Navakat has an extensive set of grammatical morphemes which combine the expression of evidentiality and tense in complex ways (Saxena 1997a; Zeisler 2004; Tournadre 2008; DeLancey 2012, 2018; Tournadre and LaPolla 2014). With respect to the categories recognized and (to some extent) the terminology used, the present description of the Navakat verbal inflectional system draws on earlier descriptions of West Tibetic language varieties-and especially the varieties classified together with Navakat under "Western Innovative Tibetan" in Bielmeier et al. (MS 2008)—e.g., those of Hein (2001) and Zeisler (2004, p.c.), although with due consideration of the fact that the grammatical systems of even closely related Tibetic varieties may differ considerably in their details (Tournadre and LaPolla 2014: 252-256). Table 31 provides an overview of the verbal inflectional categories in Navakat. ${ }^{57}$

It is important to mention here that we find considerable variation in the realization of various inflectional endings. For example, normally the first person future ending is $-(k)$ an,

Copulas and their inflectional categories

|  | Equational |  | Existential |  |
| :---: | :---: | :---: | :---: | :---: |
|  | NFUT | FUT | NFUT | FUT |
| EGO | jin | $t^{\text {háaba }}$ ajin | $\grave{o}-a t$ | dèt-kan ${ }^{58}$ |
| FACT | jin-do | $t^{h}{ }^{\text {á-kã:k }}$ | ò-kã:k | dèt-kã:k |
| VIS | jin-uk |  | ${ }^{n}$ dùk |  |
| NOW |  |  | dèt-uk |  |
| NVIS |  |  | tàk |  |
|  | Verbal inflectional categories in non-copula constructions |  |  |  |
|  | NPST | PST | FUT |  |
| EGO | -at | -an/-van, V.pst | -(k)an |  |
| EnA |  | -tury |  |  |
| FACT | -(k) $\tilde{a}_{\text {a }} \mathrm{k}$ | -ã:k/-vã:k | -(k) $\tilde{a}^{\text {a }}$ k |  |
| VIS | V-nmlz jin-uk, (tã $(\eta))^{n} d u ̀ k$ | $(-) s \tilde{o}(\eta)$ |  |  |
| NOW | -uk | V dèt-uk |  |  |
| NVIS | tàk |  |  |  |
| HI |  | $(-) t \tilde{a}(\eta)$ |  |  |

### 4.3 Copula Constructions

4.3.1 Non-Future Tense
jìn, ò, ndùk, dèt and tàk occur in non-future copula constructions, where jin occurs in the equational copula construction in non-future and the rest occur in the existential copula construction. jin with no inflectional ending is egophoric, while the copula jin with -uk indicates that the speaker has direct knowledge of that which is being described as s/he has seen it personally, while $j i n$ with the suffix - $d o$ indicates that the speaker does not have direct (factual) knowledge.

[^50](89) $\eta a ̀ ~ J i ŋ b a ~ j i ̀ n ~$

1SG farmer cop.NFUT.EGO
'I am/was a farmer.'
(90) nèt Jiŋba jìn

1PLE farmer cop.nfut.ego
'We are/were farmers.'
(91) $k^{h j ø ́ t ~ J i ŋ b a ~ j i n-u k ~}$

2SG.NH farmer cop-NFUT.VIS
'You are/were a farmer.' (Direct knowledge)
(92) $k^{h} o ́ \quad$ Jiŋba jin-qo

3sg.nh farmer cop-NFUT.FACT
'He is/was a farmer.' (Indirect knowledge)
(93) khóvat fiŋba jin-uk

3PL.NH farmer COP-NFUT.VIS
'They are/were farmers.' (Direct knowledge)
(94) tú: lò tfúkfik=i jin-uk
son year eleven=poss cop-nFUT.VIS
'(His) son is eleven years old.' (Direct knowledge)

In the following example, jin-uk occurs, if, the speaker has personally seen that the meat is/was fresh.
(95) í fá sóma jìn-uk
this meat fresh cop-nfut.vis
'This meat is/was fresh.' (Direct knowledge)

In non-future tense constructions, time adverbials are used to specify the temporal framework of a copula construction.
(96) $\eta a ̀ ~ J i p b a ~ j i n ~$

1SG farmer cop.nfut.ego
'I am/was a farmer.'
(97) lò nú: ŋàn=la ŋà fība jìn
year two inside=all 1SG farmer cop.nfut.ego
'Two years ago I was a farmer.'
$\grave{o},{ }^{n} d \grave{u} k$, dèt and tàk occur in the existential copula construction. The copula $\grave{o}$ followed by the suffix -at occurs in egophoric and factual contexts (98-99), while $\grave{o}-k a \tilde{z} k$ occurs when the speaker does not have direct knowledge, but knows it for a fact (100-103).
(98) $\ddagger$ à jùl=na ò-at

1SG village=LOC COP-PRS.EGO
'I am in the village.'
(99) nèt jùl=na ò-at

1PLE village=LOC COP-PRS.EGO
'We are in the village.'
(100) $k^{h} j ø ́ t \quad$ jùl=na ò-kã:k

2SG.NH village=LOC COP-NPST.FACT
'You are in the village.' (Indirect knowledge)
(101) $k^{h o ́} \quad j u ̀ l=n a \quad \grave{o}-k a ̃: k$

3sg.NH village=LOC COP-NPST.FACT
'He is in the village.' (Indirect knowledge)
(102) khóvat jùl=na ò-kã:k

3PL.NH village=LOC COP-NPST.FACT
'They are in the village.' (Indirect knowledge)
(103) píti=na gùnba màybo ò-kã:k
p.name=LOC temple many COP-NPST.FACT
'Spiti has many temples.' (Indirect knowledge)

Similarly, the distribution of the remaining existential copulas (i.e., ${ }^{n} d u ̀ k$, dèt and tàk), too, is evidentially conditioned. ${ }^{n} d u ̀ k$ indicates that the speaker has direct knowledge of that which is being described by having seen it personally (104).
(104) kàktse=ji $k^{h} a ́=n a \quad p u ́ l i ~ t i ̂ k ~ n a ̀ ̀ k ~$
crow=poss mouth=LOc bread one cop.NFUT.VIS
'There is somebread in the crow's beak.' (Direct knowledge)
dèt-uk, on the other hand, marks a change of state, where the speaker was a witness to the change (105).
(105) nám ${ }^{59}$ tín dèt-uk
weather cloud COP-NFUT.NOW
'The weather is cloudy.' (It is cloudy.) (Background: it was sunny just a while ago, but now it is cloudy; the speaker witnessed the change.)

Finally, the copula $t \grave{a} k$ (allomorph $d \grave{a} k^{60}$ ) indicates that the information conveyed in this clause is direct knowledge, but based on the speaker's non-visual perceptions. This includes expressing internal feelings as well as perceptions of touching and smelling. See (106-109).

```
(106) thérmos=ki nà\eta=na tfà tàk
    thermos=poss inside=LOC tea cop.NFUT.Nvis
    'There is tea in the thermos.' (Background: The speaker feels the weight
    of a thermos, and inferes/guesses/assumes that there is tea in the ther-
    mos.)
(107) thérmos=ki nà\eta=na tyà nduk
    thermos=Poss inside=LOC tea cop.NFUT.vis
    'There is tea in the thermos.' (Direct knowledge)
```

(108) $k^{h} a ́ y b=i^{61} \quad n a ̀ y=n a \quad k^{h i}$ tàk
house $=$ POSS inside $=$ LOC dog cop.NFUT.NVIS
'There is a dog in the house.' (Background: The speaker hears the noise
of the barking coming from the house. Thus he assumes that there is a
dog in the house.)
(109) $k^{h a ́ a ́ y b=i ~ n a ̀ y=n a ~} k^{h i}{ }^{n} d u k$
house=poss inside=LOC dog cop.NFUT.vis
'There is a dog in the house.' (Direct knowledge)

The existential copulas (excluding dèt-uk) also occur in constructions with adjectival predicates. ${ }^{62}$ The existential copulas in such constructions retain their evidential properties, described above (110-118).

59 nám literally means 'sky'.
6o In the negative existential construction, this is always realized as dàk. For example, ninmo nima tsàntej ray ts'átpa su fingaji là: yànna mindàk ‘Due to sun during the day time, which causes perspiration, one should not work during midday.'
61 The detailed form is: $k^{h} a ́ y b a=i$.
62 This is also the case in Ladakhi (Bettina Zeisler, p.c.).

```
(110) mà rìppo \({ }^{63}\) ò-at
    1SG tall COP-PRS.EGO
    'I am tall.'
(111) \(k^{h o ́} \quad l \grave{\tilde{a}}: p^{h} O^{64} \quad{ }^{n} d u ̀ k\)
    3sg.nh beautiful cop.nfut.vis
    'She is/was beautiful.' (Direct knowledge)
(112) \(m a ̀ f=i^{65} \quad\) mème \(=k i \quad\) màlej \({ }^{n} d j \grave{i}: \int a\) rìppo ò- \(k a ̃: k\)
    1PLE=POSS grandfather=POSS chin much long COP-NPST.FACT
    'My grandfather has a very long chin.' (Indirect knowledge)
(113) tá nàkpo té táey-an ò-kã:k
    horse black FOC agressive-NMLZ COP-NPST.FACT
    'The black horse has agressivity.' (The black horse is agressive) (Indirect
    knowledge)
(114) dòrzə=ki náma té là̀:pho tík ndùk
    i.name=poss wife FOC beautiful one cop.NFUT.VIS
    'Dorje's wife is beautiful.' (Direct knowledge)
(115) nám=la tshátpa tàk \({ }^{66}\)
    weather=ALL hot cop.nFUT.NVIS
    'The weather is hot.' (It is hot.) (Background: The speaker is sweating
    and he feels that it is hot today.)
(116) tiriŋ lágde tákpo tàk
    today wind fierce cop.nfut.nvis
    'The wind is fierce today.' (Background:The speaker experiences strong
    wind.)
(117) tà t(r)ấ: saך n \(n u ̀ k\)
    tea cold completely cop.NFUT.vis
    'The tea has become cold.' (Direct knowledge).
```

[^51]```
(118) tà t(r)á́: sa\eta tàk
    tea cold completely cop.NFUT.NVIS
    'The tea is cold. (Background: After the speaker drank the tea, s/he feels
    that the tea has turned cold).'
```


### 4.3.2 Future Tense

In the future tense, the regularly inflected verbs $t^{h}$ á 'become' and dèt 'sit, remain, live' function as the equational and existential copula, respectively. The egophoric form is thá-na jinn [become-NMLZ AUX.NFUT.EGO]. This verbal form occurs also in the obligative construction. In other contexts the verb ( $t^{h} a \dot{a}$ ) takes the inflectional ending -kã:k, which also occurs in noncopula constructions as a mark of indirect (factual) evidentiality.
(119) jà fiyba t thá-na jìn

1SG farmer become-nmlz AUX.NFUT.EGO
'I will be a farmer.'
(120) nèt fiyba thá-na jin

1Ple farmer become-NMLZ aUX.NFUT.EGO
'We will be farmers.'
(121) $k^{h j ø ́ t ~ J i ŋ b a ~} t^{h} a ́-k a ̃: k$

2SG.NH farmer become-npst.fact
'You are/will be a farmer.'
(122) $k^{h} o ́ ~ J i \eta b a ~ t h a ́-k a ̃: k ~$

3SG.NH farmer become-npst.fact
'(S)he is/will be a farmer.'
(123) khóvat Jibba thá-kã:k

3PL.NH farmer become-nPsT.FACT
'They are/will be farmers.'

In the existential copula construction in the future tense dèt 'sit, remain, live' functions as the copula. The inflectional endings here are the same as those in the noncopula construction (see the next section).

```
(124) \etaà jùl=ndu dèt-kan[dèkan]
    1SG village=TERM sit-FUT.EGO
    'I will be in the village.'
```

```
(125) jèt jùl=ndu dèt-kan[dèkan]
    1PLE village=TERM sit-FUT.EGO
    'We will be in the village.'
```

(126) $k^{h j o ́ t ~} j u ̀ l={ }^{n} d u \quad$ dèt-kã:k[èkã:k]
2SG.NH village=TERM sit-NPST.FACT
'You are/will be in the village.'
(127) $k^{h o ́} \quad j u ̀ l=n d u \quad d e ̀ t-k a ̃: k[d e ̀ k a ̃: k] ~$
3sg.NH village=TERM sit-NPST.FACT
'(S)he are/will be in the village.'
(128) $k^{h o ́ v a t ~ j u ̀ l=n d u ~ d e ̀ t-k a ̃: k[d e ̀ k a ̃: k] ~}$
3PL.NH village=TERM sit-NPST.FACT
'They are/will be in the village.'

### 4.4 Non-Copula Constructions

4.4.1 Past Tense

The distribution of the finite verb inflectional endings in the past tense is as follows. The two allomorphs of egophoric -an/-van are distributed as follows: -an occurs when the verb stem ends in a consonant and -van ${ }^{67}$ occurs when the verb stem ends in a vowel.
(129) mà tì-van

1SG write-PST.EGO
'I wrote.'
(130) màfak námbo ndưl-an

1PLE together walk-Pst.EGO
'We walked together.'

Some verbs have suppletive forms in the past tense, e.g., 'go' and 'do': ${ }^{n}$ do [go.nPST] : pùt [go.PST]; pè [do.nPst] : tèe [do.PST]. The same set of verb inflections is used with the verbs which have suppletive verb forms and those which do not have suppletive forms in past and non-past. To some extent the Navakat verb forms reflect the stem formation of Old and Classical Tibetan (see Appendix 3A to this chapter).

[^52]There are some instances of finite clauses where a bare verb occurs in the past tense, without any inflectional ending. When asked to clarify, the language consultants provided the corresponding sentence with inflectional endings.

```
(131) mà khó=la thón
    1SG 3SG.NH=DAT see(Nvol)
    'I saw him.'
```

(132) mà rèl ján-fo=la fú-ça fímla=la pùt-an

1SG train early-SUP=DAT board-INF p.name=ALL go.PST-PSt.EGO 'I took the earliest train to Shimla.'

Other verb inflectional endings in the past tense are -ã:k/-vã:k and (-)sõ( $\eta$ ). -vã:k occurs often, but not only, when the stem ends with a vowel and -ã:k occurs when the verb stem ends with a consonant.

When $(-) s \tilde{o}(\eta)$ functions as a verb ending, it immediately follows the main verb. ${ }^{68}$ The phonological status of $(-) s \tilde{o}(\eta)$ seems to fall somewhere between a free auxiliary and a bound morpheme as the place of articulation of $s$ in $(-) s \tilde{o}(\eta)$ is sometimes assimilated to the place of articulation of the stem-final consonant of the preceding verb, whereas in other contexts, there is no assimilation. Similarly, $\eta$ in $(-) s \tilde{o}(\eta)$ is not always articulated clearly. The vowel in $(-) s \tilde{o}(\eta)$ is nasalized with or without the final $\eta$. (-) $) \tilde{o}(\eta)$ occurs with agentive (transitive, intransitive) as well as with non-agentive verbs.

```
(133) mà=ji nò lùk ttó=ru pùt-số( \((\eta)\)
    1SG=poss y.brother sheep graze=TERM go.PST-PST.vis
    'My younger brother went to herd lambs.' (Direct knowledge)
```

(134) ràm kjúk số( $y$ )
i.name vomit PST.vIS
'Ram vomited.' (Direct knowledge)

The distribution of the verb endings -ã:k/-vã:k and (-)sõ( $\eta$ ) is evidentially conditioned: $(-) s \tilde{o}(\eta)$ occurs when the speaker has direct knowledge of that which is being described by having seen it; - $\tilde{:}: k /-v \tilde{a}: k$ occurs when the speaker does not have direct evidence, but knows it for a fact.

```
(135) khón pùt-ã:k / *pùt-vã:k
    3SG.H go.PST-PST.FACT
    'He went.' (Indirect knowledge)
(136) \(k^{h} j\) ót pùt-ã:k/ *pùt-vã:k
    2SG.NH go.PST-PST.FACT
    'You went.' (Indirect knowledge)
(137) \(k^{h o ́} \quad m a ̀=l a \quad t a ́ e-v a ̃: k\)
    3sg.NH 1SG=DAT observe.PST-PST.FACT
    'He observed me.' (Indirect knowledge)
(138) \(k^{h}\) ó \(\quad m a ̀=l a \quad\) táe-số \((\eta)\)
    3sg.NH 1SG=DAT observe.PST-PST.VIS
    'He observed me.' (Direct knowledge)
(139) dòrze=su \(k^{h} o ́=l a \quad d u ̀ n-s o ̂ ́(\eta)\)
    i.name=ERG 3SG.NH=DAT beat-PST.VIS
    'Dorje beat him.' (Direct knowledge)
```

```
(140) dòrze khó=la dùn-vã:k
```

(140) dòrze khó=la dùn-vã:k
i.name 3SG.NH=DAT beat-PST.FACT
i.name 3SG.NH=DAT beat-PST.FACT
'Dorje beat him.' (Indirect knowledge)

```
    'Dorje beat him.' (Indirect knowledge)
```

Finally, $-t \tilde{u}(\eta),(-) t \tilde{t}(\eta), t u ́ k$ and $t o ̀$ too, occur as verbal inflectional endings in the noncopula constructions.

When the first person argument is the affected (i.e., non-agent) argument in the past tense, the verb takes the suffix $-t f u(\eta)$ (allomorph [ $\left.\left.d_{3} \tilde{o}(\eta)\right]\right)$. It always occurs as the last element in a finite sentence. The first person argument may, but need not necessarily, be the grammatical subject in the clause.
(141) tìriŋ $p^{h i ́ r o k ~ n a ́=n a s u ~ m a ̀=j i ~ n a ́-t h a ́ k ~}{ }^{69}$ tø̀n-ḑu( $\eta$ ) today evening nose=ABL $1 S G=$ POSS nose-blood come.out-PST.ENA 'Today evening the blood came out from my nose.'

[^53]```
(142) mà =ji tòtpa=ru \(k^{h} o ́=j i \quad t^{h} i m o z o \eta ~ p^{h o} k-t y u ̄(y)\)
    1SG=POSS stomach=TERM 3SG.NH=POSS elbow hit-PST.ENA
    'His elbow hit my stomach.'
```

The following two pairs of examples show that the first person argument has to be the recipient (i.e., the non-agentive argument) for $-t f(y)$ to occur.
(143) $m a ̀=s u \quad k^{h} o ́=j i \quad$ làkpa $=r u \quad$ sóa gjèp-tã( $($ ) 1SG=ERG 3 SG.NH=POSS hand=TERM tooth.PL shoot-HI 'I bit his hand.'
(144) tiva=su mà=ji làkpa=ru sóa gjèp-tū(y) child=ERG 1 SG=poss hand=TERM tooth.PL shoot-PST.ENA 'The baby bit my hand.'
(145) í: gàdi mà =su ági thétpo=la tát tã( $\eta$ ) this watch 1 ISG=ERG o.sister big=Dat give.PST HI 'I gave this watch to my elder sister.'
(146) i: gàdi mà=la ázi thétpo=su tá-yün dem.prox watch 1SG=Dat o.sister big=erg give-pst.ena 'My elder sister has given this watch to me.'

As these examples show, (-)tã( $y$ ) too, occurs with first person subjects. Unlike $-t \tilde{u}(\eta),(-) t \tilde{a}(\eta)$ occurs in constructions where the first person argument is also the agent. Further, unlike $t \tilde{u}(\eta),(-) t \tilde{a}(\eta)$ also occurs with all persons. Phonologically the status of $(-) t \tilde{a}(\eta)$ is somewhere between a bound morpheme and a free auxiliary. At times, it is also realized as $-s \tilde{a}(\eta)$. It indicates heightened intentionality. ${ }^{70}(-) t a \tilde{y} \eta$ is the grammaticalized form of the verb meaning 'give'. The verb inflectional ending (-)tã( $y$ ) is frequently, but not necessarily, followed by the auxiliary ${ }^{n} d u ̀ k$.
(147) púflisu òma síy thúy-tấ( $y$ ) ndùk
cat=Erg milk all drink-HI aux.NFUt.vis
'The cat drank all the milk.'

[^54]```
(148) ràm=su tfák táa \((\eta)^{n} d u ̀ k\)
    i.name=ERG break HI AUX.NFUT.VIS
    'Ram has broken (X).'
```

As the ungrammaticality of the following example illustrates, (-)táa $(\eta)$ cannot be followed by the auxiliary jin (see below).

```
(149) *mà síkul=la pùt-tã(\eta) jìn
    1SG school=ALL go.PST-HI AUX.NFUT.EGO
    'I have gone to the school/I went to the school.'
```

Further, (-)tã( $\eta$ ) does not occur with non-past verb forms. For example:

```
(150) *mà síkul=la }\mp@subsup{}{}{n}d\grave{o}-ta\tilde{a}(\eta) jin
    1SG school=ALL go.NPST-HI AUX.NFUT.EGO
    'I have gone to the school/I went to the school.'
```

The copula forms jin-uk and ${ }^{n} d \grave{u} k$ occur in noncopula constructions, where they function as auxiliaries. In my material the auxiliary jin-uk is always preceded by a nominalized verb form. For example:
(151) dòlma náma=la pùt dè-kan ${ }^{71}$ jìn-uk
i.name wife=ALL go.PST sit-NMLZ AUX-NFUT.VIS
'Dolma has gone as a wife (and has stayed there that way).' (Direct knowledge)
${ }^{n} d u ̀ k$ as an auxiliary is frequently preceded by $t \tilde{a}(\eta)$. Such constructions can have an agentive or a non-agentive interpretation. ${ }^{n} d u ̈ k$ here indicates that the speaker has direct knowledge of that which is being described.

```
(152) thápka=ji nà\eta=i fí\eta-ja sí\eta tùk-sã\eta
    oven=POSS inside=POSS wood-PL all burn(intr).PST-HI
    ndùk
    AUX.NFUT.VIS
    'All the wood inside the oven has burnt (non-volitional).' (Direct knowl-
    edge)
```

[^55](153) $k^{h o ́ f a k-j a ~ m a ̀ m a=l a ~}{ }^{72}$ pùt $\left.{ }^{n} d u ̀ k \quad[p u ̀ n d u k]\right]$

3PL.NH-PL city=ALL go.PST AUX.NFUT.VIS
'They have gone to the city.' (Direct knowledge)
(154) $k^{h}$ ój màma la pùt ndùk [pùn ${ }^{\text {duk] }}$

2SG.H city ALL go.PST AUX.NFUT.VIS
'You (H) have gone to the city.' (Direct knowledge)

### 4.4.2 Non-Past Tense

The verbal ending -at occurs as an egophoric marker in non-past.

```
(155) mà fàkta:n là:=la n
    1SG every.day work=ALL go.NPST-PRS.EGO
    'I go to work every day.'
(156) màfak fàkta:n námbo ndúl-at
    1PLE every.day together walk-PrS.EGO
    'We walk together every day.'
```

The verb ending -( $k$ ) $\tilde{a}: k^{73}$ indicates indirect (factual) knowledge of that which is being described. While the verbal inflection $-u k^{74}$ indicates a change of state which the speaker has direct knowledge of. Depending on the context, the verb can have a present or a future tense interpretation, but never past.
(157) $k^{h i ́-j a ~ m u ́-k a ̃: k ~} k^{75}$
dog-pl bark-nPST.FACT
'The dog will bark' or 'The dog barks.' (Indirect knowledge)
màma 'downwards (direction)' is also used to refer to 'city', 'town' as all cities and towns are located to the south and in lower altitudes as compared to the Nako village. As mentioned above, jòk 'down' is also used to refer to a city.
$-(k) \tilde{a}: k$ can also occur with egophoric arguments in some restricted contexts, where it has an irrealis-modality interpretation, for instance referring to the speaker's intention of doing something in the future. For example, mà láv-(k)ã:k 'I WILL study/teach.' (Background: This verb form occurs when someone doubts the speaker's intention, and, the speaker reasserts his/her intention of studying/teaching.); mà ti-ã:k‘I WILL write.' (Background: Similar background as in the preceding example).

```
(158) dòrze síkul=la n
    i.name SCHOOL=ALL go.NPST-NPST.FACT
    `Dorje goes to school.' (Indirect knowledge)
```

The semantic differences between -( $k$ ) $\tilde{a}: k$ and $-u k$ can also be seen by comparing examples $(157,159)$ with examples $(158,160)$. When $-(k) \tilde{a}: k$ is replaced with $-u k$, the semantic interpretation of the clause changes too.
(159) khófak fín fá-kã:k

3PL.NH wood break-NPST.FACT
'They cut wood (every day) or They will cut wood.' (Indirect knowledge)
(16o) k ${ }^{h} o ́ f a k$ fón fák-uk
3PL.NH wood break-nPST.VIS
'They cut wood (every day) or They will cut wood.' (Change of state, direct knowledge)
(161) tiva tsé-ã:k
child play-NPST.FACT
'The child plays (every day)' or 'The child will play.'
(162) tiva tsé-uk
child play-NFUt.now
'The child is playing.' (Change of state, direct knowledge)

The following examples illustrate that $-(k) \tilde{a}: k$ and $-(v) \tilde{a}: k$ have different temporal reference.
(163) $k^{h j ø ́ t ~ f i ́ g ~ t u ́ p-k a ̃: k ~}$

2SG.NH wood chop-NPST.FACT
'You (NH) (will) chop wood.' (Indirect knowledge)
(164) k hjót fíŋ túp-vã:k

2SG.NH wood chop-PST.FACT
'You (NH) chopped wood.' (Indirect knowledge)
(165) dòlma fé-kã:k
i.name know-nPst.FACT
'Dolma knows/will know (X).' (Indirect knowledge)
(166) dòlma fé-vã:k
i.name know-pst.fact
'Dolma knew (X).' (Indirect knowledge)

The copulas dèt-uk and tàk occur in noncopula constructions, where they function as auxiliaries.
dèt-uk in a non-copula construction indicates that there is a change of state and that the resulting state prevails. It further indicates that the speaker has direct knowledge of this change of state, having witnessed it personally. The main verb in its bare form immediately precedes this auxiliary.
(167) $p^{h}{ }_{i}^{\prime}=n a \quad$ pàlay $f i \quad$ dèt-uk
that=LOC cow die AUX-NFUT.now
'A cow has died there.' (Background: A cow was alive and suddenly, right in the front of the speaker's eyes, she fell off and died; the cow is still lying there.) (Direct knowledge)
(168) píti lùyba=nasu tshópba nú: lép dèt-uk
p.name valley=ABL businessman two arrive AUX-NFUT.now
'Two traders from the Spiti valley have arrived (here).' (Background: The speaker saw the two businessmen from Spiti arrive here; they are still here.) (Direct knowledge)
(169) $m a ̀=j i \quad t i v a=j i \quad$ tála thúg dèt-uk 1SG=POSS child=POSS forehead hurt/collide AUX-NFUT.now 'My child's forehead is hurt.' (Background: The speaker's child was well just a while ago, but now he got hurt and his forehead is hurting; the speaker himself saw the child getting hurt.) (Direct knowledge)

The copula $t \grave{a} k$, too, retains its semantic qualities when it occurs as an auxiliary in non-copula constructions.
(170) mà=ji púpba sùk tàk

1SG=POSS inside pain COP.NFUT.NVIS
'My shoulder has pain.' (The speaker is feeling the pain)

### 4.4.3 Future Tense

$-(k) a n$ is the future tense egophoric suffix. It is realized as -kan and -an. Their distribution is, however, not phonetically conditioned. -kan occurs also with verb stems endings in consonants, e.g. kór-kan [drive-FUT.EGo] (cf. kórtfa 'to
drive'); kól-kan ${ }^{76}$ [cook-FUT.EGO] (cf. kóldza 'to cook'). Similarly, the allomorph -an occurs, too, with the verb stems ending in vowels, e.g. zò-an, *zò-kan [makefut.ego] (cf. zòdza 'to make'); tsé-an, *tsé-kan [play-fut.EGo] (cf. tsédza 'to play').
(171) mà láp-kan

1SG teach/study-FUT.EGO
'I will teach/study.'
(172) mà tìan / *tìkan

1SG write-FUT.EGO
'I will write.'

### 4.5 Final Auxiliaries

Finally, túk and tò which occur sentence-finally, indicate probability. They differ, however, in their semantic qualities. túk indicates that the speaker is drawing an inference, based on some observation. For example,
(173) $k^{h} o ́=j i \quad$ tú: $=k i \quad$ látpa ètpo ò-ta ${ }^{77}$ túk

3SG.NH=POSS son=POSS brain good COP-? INFERENCE
'His son (seems to) have good brain.' (Indirect inference) (Background: His son is securing good results in his exams, even though he is seen playing all the time)
(174) sèptuŋ fimbo kól pòr-a túk
food good cook keep inference
'There is delicious cooked food.' (Background: Good smell of food is coming, therefore the speaker infers that there is good food.)

Distinct from this, $t^{78}$ seems to convey probability, without reference to any external perceivable cause. It occurs with all persons in copula and non-copula constructions. In the copula construction it occurs with òt and jin in my material.

76 kór-an and kól-an have the past tense interpretation, i.e., (I) drove' and '(I) cooked', respectively.
77 The $t a$ here is not the same as $t a ̂ ́(\eta)$.
78 tò is also realized as [t̀̀].
(175) màfak sàt tò

1PLE eat PROBABILITY
'We might eat.'
(176) $k^{h} o ́ \quad$ dilli $=n a \quad$ òt tò

3SG.NH p.name=LOC COP PROBABILITY
'He may be in Delhi.'
(177) thòdon=gi tòtpa $p^{h i ́ t a:=l a ~ t o ̀ n / t o ̀ n ~ d e ̀ t-u k ~}$
i.name=POSS stomach outside=LOC come.out AUX-NFUT.NOW
tiva òt tò
child exist probability
'Choden's belly has come out, maybe she is pregnant.'
(178) tá:n=na kàktse kná gjá-irak ndònbo ò ${ }^{h}-n a$
roof=LOC crow mouth shoot-AUX.NFUT.NVIs guest come-nmlz jin-dò
aUX-PROBABILITY
'(The speaker hears that) A crow is cawing on the roof, (some) guest may come.'

When tò follows the copula jin the two comprise one prosodic unit. In such constructions tò is always realized as do ([jìndo]). [jìndo] occurs with all persons.
(179) í: mi-láp-tfa=na mà tàksay lùkzi
this NEG-educate-INF=LOC 1SG immediately herdsman
$j i n-d o ̀$
AUX-PROBABILITY
'Without this education, I might probably be be a herdsman (now).'
(180) tá:n ${ }^{79}=n a$ kàktse tágera ${ }^{n}$ dònbo ò on-na jìn-dò
roof=LOC crow caw( N ) guest come-nmlz AUX-PRobability
'The crow is cawing on the roof, some guest may come.'
to also occurs in constructions with non-first person subjects, where the preceding verb takes the egophoric marker -at, which may serve to indicate that the statement is a judgement (a guess) on the part of the speaker.

79 This is realized as [tắ:].

## (181) k ${ }^{h o ́ ~ g a ̀: d i ~ k o ́ r-t f a ~ l a ́ p-a t ~ t o ̀ ~}$

3SG.NH vehicle drive-Inf learn/study-Prs.ego probability 'He might be learning to drive.'

In constructions with suppletive past-tense verb stems, $\iota o$ can follow the bare verb.

```
(182) mà pùt tò
    1SG go.PST PROBABILITY
    'I might go.'
```


### 4.6 Negation

$m i-$ and $m a$ - function as negative markers in Navakat and mèt functions as a negative existential. mi- occurs in copula and noncopula constructions in the non-past tenses in finite and non-finite clauses (including nominalized clauses).

```
(183) thúr=la rìvoך gjùk-gui \({ }^{80}\)
    downhill=ALL rabbit run-INTERNAL.CAPABILITY
    mi-fór-kã:k
    NEG-run-NPST.FACT
    'Rabbits can't run downwards.' (Indirect knowledge)
```

(184) mi-sin-na là:
NEG-finish-NMLZ work
'The work which does not get finished'
$m a$ - occurs in the past tense with all persons in copula and noncopula constructions.
(185) ŋà dàgdar mà:n 1SG doctor NEG.COP 'I was not a doctor.'

8o The slow-speech form is gjük-gui. While in Nàvakat -gui is obligatory here, in the neighboring villages such as Chango, it does not occur. -gui here indicates internal capacity. Contrast this with the following example: rivõ( $\eta$ ) thúr la gjùk mi-fór-kã:k [rabbit downward all run NEG-run-NPST.FACT] 'Rabbits can't run downwards (due to created obstructions like fencing or walls erected)'.
(186) tà lò tàmo-ja gùã mànbo tát ${ }^{81}$ ma-số $(\eta)$ now year hen-pl egg many give. PSt neg-pst.vis
'This year the hens did not produce many eggs.' (Direct knowledge)
mèt functions as the negative existential. It occurs with all persons and numbers in all tenses.
(187) mà jùl=na niriŋ màjbo mèt

1SG village=LOC relative many NEG.COP
'I don't have many relatives in the village.'
nèt jùl=na mèt
1PLE village=LOC NEG.COP
'We are not in the village.'
(189) $k^{h} \dot{o} \quad$ jùl=na mè-kãnk

3SG.NH village=LOC NEG.COP-NPST.FACT
'He will not be in the village.'
In constructions where the finite verb consists of a main verb and an auxiliary, the negative prefix is affixed to the auxiliary.
(190) ${ }^{n g o ̀ ~ s u ̀ k=s u ~ d i ̀ r i y ~ l a ̀: ~ p e ̀ t f a ~ m i-d a ̀ k ~}$
head pain=Ins today work do-nmlz neg-Aux.nfut.nvis
'Because of headache, (I) am not feeling like working today.'

### 4.7 Imperative and Prohibitive

4.7.1 Imperative

As seen in Section 4.1.2, Navakat has a small set of verbs which have distinct honorific and non-honorific verb forms. This distinction in this verb set is maintained in the imperatives. Further, in the non-honorific verb forms, as shown below, there is a change in the stem vowel in two instances (sò, $d \grave{t}$ ); in other cases the non-honorific imperative verb forms are suppletive forms.

81 As mentioned earlier, the word-final consonant is barely audible. When asked, the language consultant, at times, provided the word-final consonant as [ t ], while at other times, as [d]. This, however, cannot be attributed to the Tibetan writing system, as my language consultant did not know any Tibetan (including its writing system).

|  | Infinitive | H Imperative | NH Imperative |
| :---: | :---: | :---: | :---: |
| 'to eat' | $t^{\text {fódtfa }}$ (H), sàdza (NH) | $t^{h}$ ǿt | sò |
| 'to drink' | $t^{h}$ ǿttfa (H), thúvdza (NH) | $t^{h}$ ǿt | $t^{h} u$ ¢ |
| 'to go' | kjǿttfa (H), ${ }^{n}$ dòdza (NH) | kjót | són |
| 'to sit' | зù: $\int a(\mathrm{H})$, dètfa (NH) | $3^{u} \mathrm{u}$ | dòt |

Besides this rather small set of verbs, the honorific imperative verb form is formed by adding the suffix -rotic [rotfi] to the verb stem. The formation of the non-honorific imperative verb forms, on the other hand, exhibits more than one strategy. First, it could just be a bare verb stem (i.e., the verb form without the infinitive marker).

Infinitive H Imperative NH Imperative

| 'to burn' | túktfa | túk-rotfı | túk |
| :--- | :--- | :--- | :--- |
| 'to put on' | kóndza | kón-rotfı | kón |
| 'to cook' | kóldza | kól-roţı | kól |
| 'to throw' | timḑa | tìm-rotfı | tìm |

Next, there are also some instances, as illustrated below, where the nonhonorific imperative verb form involves a change in the stem vowel (as compared to the vowel in the infinitive). Most infinitive verbs in this set have $a$ as the stem vowel in their infinitive forms; some have $e$ as the stem vowel in their infinitive forms. Their imperative verb stems have [o] as the stem-final. ${ }^{82}$

|  | Infinitive | H Imperative | NH Imperative |
| :---: | :---: | :---: | :---: |
| 'to sleep' | nàldza | jàl-rotí | nòl |
| 'to live' | dèta | dèt-roti | dòt |

82 At least in some cases the verb stems with $e$ are etymologically related to Tibetan forms with $a$, e.g. the original root has an a: $s d a d>d e t$, where the $e$-vowel appears because of final $-t$. In the case of gjep, CT rgyab, the change of the vowel seems to have been triggered by the preceding palatal.
(cont.)

|  | Infinitive | H Imperative | NH Imperative |
| :--- | :--- | :--- | :--- |
| to fold' | táptfa | táp-rotfi | tóp |
| 'to tie' | dàmdga | dàm-rotfi | dòm |
| 'to carry' | tàktfa | tàk-rotj $\imath$ | tò |

In addition, there are some instances where the non-honorific imperative verb form takes an additional final vowel ( $-i$ or $-e$ ).

|  | Infinitive | H Imperative | NH Imperative |
| :---: | :---: | :---: | :---: |
| 'to dig' | kótfa | kót-rotje | kó-e |
| 'to gather' | ${ }^{n}$ dùtfa | ${ }^{\text {ndutàt-roti }}$ | ${ }^{n} d u ̀-i$ |
| 'to hide' | bàtfa | bàt-rotil | bò-e |
| 'to bathe, to wash' | tútfa | tút-rotic | tú-i |

Finally, while the honorific imperative verb form continues to be formed by adding -rot $\mathcal{i}$ to the verb stem, in the following instances in the non-honorific imperative verb forms the stem-final consonant is deleted and there is a compensatory lengthening of the preceding vowel.

|  | Infinitive | H Imperative | NH Imperative |
| :--- | :--- | :--- | :--- |
| 'to bury' | kúydza | kúy-roţ | kứ: |
| 'to plant' | tsúktfa | tsúk-rotfi | tsú: |
| 'to beat' | dùjḑa | dùŋ-rotfi | dǜ: |
| 'to play, to dance' | tséḑa | tsé-rotfi | tsé: |

### 4.7.2 Prohibitive

The honorific and nonhonorific distinction is also maintained in the prohibitives.

|  | H.INF | NH.INF | H.PROH | NH.PROH |
| :---: | :---: | :---: | :---: | :---: |
| 'to say, to tell' | súp-dza | $s e ̀(r)-t f a^{83}$ | ma-súv | ma-sèr |
| 'to sleep' | zim-dya | nàl-dza | ma-zim | ma-nàl |
| 'to stay' | зù:fa | dè-tfa | ma-zù: | ma-dèt |
| 'to put on (clothes)' | nám-dza | kón-dza | ma-nám | ma-kón |

Apart from this limited set, the non-honorific prohibitive verb forms are formed by prefixing the negative morpheme $m a$ - to the infinitive verb stem. The honorific prohibitive verb form, on the other hand, is composed by suffixing -ro to the verb stem, and adding mapèt to this verb form (i.e., V-ro mapèt).

|  | INF | H.PROH | NH.PROH |
| :---: | :---: | :---: | :---: |
| 'to do' | $p \grave{e}-t f a$ | pèt-ro mapèt | ma-pèt |
| 'to burn, to light' | tùk-tfa | tùk-ro mapèt | ma-tùk |
| 'to sew (by hand)' | tsém-dy a | tsém-ro mapèt | ma-tsém |
| 'to wrap' | till-dza | tíl-ro mapet | ma-til |
| 'to get' | $t^{\text {hóp-tfa }}$ | $t^{\text {hóp-ro mapet }}$ | ma-thóp |
| 'to kill' | sá-ta | sát-ro mapèt | ma-sát |
| 'to scrape' | dàr-tfa | dàr-ro mapèt | ma-dàr |

## 5 Clauses and Sentences

Navakat is a verb-final language.
(191) nám=la kárma fár-số( $\eta$ )
sky=ALL star rise-PST.VIS
'Stars rose (appeared) in the sky.' (Direct knowledge)

83 [sè(r)tfa].

$$
\begin{array}{ll}
\text { (192) } & t^{h a ́ a ́=s u ~} \quad p^{h i ́}=n a \quad \text { filltik tík sát pór-uk } \\
\text { hawk=ERG DEM.DIST=LOC sparrow one kill keep-NFUT.now } \\
& \text { 'The hawk has killed a sparrow over there.' (Direct knowledge) }
\end{array}
$$

While SOV is the most frequent word order in Navakat, other word orders are also encountered.

```
(193) nòt \(f u y=g i \quad k i ́ t a: b ~ t i v a-j a=s u \quad\) fá-tãy \({ }^{n} d u ̀ k\)
    y.brother=Poss book child-PL=ERG tear-HI COp.NFUT.VIS
    'The children have torn (my) younger brother's book.' (Direct knowl-
    edge)
```


### 5.1 Experiencer Subjects

As other languages of this region, Navakat, too, has the so-called experiencer subject construction (or dative subject construction). When the "subject" is not a volitional participant, it takes the dative marker.

```
(194) évi=ki tú:\eta-ja mà=la àtla
    grandmother=POss story-PL 1SG=DAT remember(N)
    mi-ndàk
    NEG-COP.NFUT.NVIS
    'I don't remember grandmother's stories.'
(195) mà=la tàymo tàk
    ISG=DAT cold(n) COP.NFUT.NVIS
    'I feel cold.'
```

A similar construction is used for expressing possession in a wide sense.
(196) dòlma=la mìbo já ò-kã:k
i.name=DAT brother five COP-NPST.FACT
'Dolma has five brothers.' (Indirect knowledge)
(197) $m a ̀=l a ~ t i v a ~ s u ́ m ~ o ̀-a t ~$

1SG=DAT child three cop-prs.Ego
'I have three children.'

As in Kinnauri, the verb forms are differently distributed in the experiencer subject constructions, compared to clauses with regular nominative or ergative subjects, with respect to the egophoric and evidential markers.

### 5.2 Questions

In content questions the question word (see Section 3.3.3) tends to "right"dislocate towards the focus position immediately before the verb (see example 196-199). The verbal inflection in the interrogative constructions remains the same as in the declarative sentences, except that the verb takes the question suffix (-a:/-va: or -e:/-ve:), where -a:/-va: functions as the honorific interrogative suffix and $-a: /-v a$ : functions as the non-honorific interrogative suffix. ${ }^{84}$ The allomorphs with $-v$ occur when the verb stem ends with a vowel.
(198) $k^{h o ́} \quad k a ̀ n q u ~ n \grave{a} l-s \tilde{u}^{85}-(v) \tilde{a}:$

3SG.NH where sleep-PST.VIS-Q.H
'Where did he sleep?' (Direct knowledge)
(199) khóvat tîla pùt-sû́-(v) $\tilde{a}^{86}$

3PL.NH why go.PST-PST.VIS-Q.H
'Why did they go?' (Direct knowledge)
(200) kháŋba sú-su zòe-sứ-(v) ã:
house who-ERG build.PST-PST.VIS-Q.H
'Who built the house.' (Direct knowledge)
(201) $k^{h j ø ́ ~ t s u ́ k ~ t f e ̀-d z a ~ o ̀ j-v e: ~}$

2SG.NH how play-INF come-Q.NH
'How did you come.'

The polar (yes-no) question construction, on the other hand, is formed by simply affixing the interrogative suffix $-a_{: /-v a:}$ or $-\mathrm{e}^{2} /-v e:$ to the verb stem.


84 This honorific-non-honorific distinction in the yes-no question construction is not marked in the neighboring village Chango. In Chango the yes-no question suffix is $-e$ with both honorific and non-honorific referents.
85 This is a shortened form of -số $(\eta)$.
86 The slow-speech verb form is pùt-số $\eta-\tilde{a}$ :.

```
(204) khjǿ fimla=la pùt-e:
    2SG.NH p.name=ALL go.PST-Q.NH
    'Did you go to Shimla?'
(205) khjǿ jè(j) láp-e:
    2NH script learn-Q.NH
    'Did you study?'
```


### 5.3 Clausal Nominalization

-po, -kan and -na function as nominalizers in Navakat. While -po occurs in a few lexicalized, frozen expressions (e.g. jókpo 'servant'), -kan and -na are productive nominalizers. The nominalizer -kan functions as a non-patientive nominalizer. Its head noun is someone who has the qualities to carry out the described action. ${ }^{87}$ That seems to be the reason why examples such as, 'bird which will die (on its own)' and 'mirror which will break (because it is old)', too, take the nominalizer -kan.

```
(206) òma tér-kan pàlay
    milk give-NMLz cow
    'Cow which gives milk'
(207) thúy-an (mi)
    drink-NMLZ (man)
    'Man who drinks'
(208) mi-phúr-kan tfà
    NEG-fly-NMLZ bird
    'Bird which does not fly'
(209) múk( \(\left.{ }^{h}\right)^{88-a n} \quad k^{h}{ }^{\prime}\)
    bark/bite-NMLz dog
    'The dog which barks/bites'
```

87 The names of some professions are not formed with the nominalizer -an. For example, zò 'blacksmith', zila 'weaver', èmdzi 'traditional doctor'.
88 This lexical item occurs both for 'to bark' and 'to bite'. There is a slight aspiration [h] at the end.

```
(210) fí-an 89 tfà
    die-Nmlz bird
    'Bird which is to die (on its own)'
```

This nominalization exhibits some noun-like characteristics. For example, the plural marker can be suffixed to the nominalized verb, e.g. dùydza 'to beat', dùyan ‘drummer': dùŋ-an-ja ‘drummers'; lútay-an ‘singer': lútaŋ-an-ja ‘singers' (cf. lú 'song', táydza 'to leave'). The nominalized clause also retains some verblike characteristics. For example, it takes the negative marker mi-, and when there is a direct object in a nominalized clause, it precedes the nominalized verb, obeying normal intraclausal constituent order. Syntactically, the nominalized clause behaves like a determiner rather than like an adjective, in that it precedes the head noun.

The nominalizer -na, on the other hand, occurs in constructions where the head noun is a patient. The head noun follows the nominalized verb. As is the case with the nominalizer -kan, -na, too, can take the negative marker mi-. As we can see in these examples, a stem-final consonant appears when the nominalizer is suffixed to the verb stem (tút-na, sád-na, fik-na), which does not appear in the corresponding infinitive verb forms (tútfa 'to wash (clothes etc.)', sátfa 'to kill', and fídza 'to die').
(211) tút-na kòelak(-ja)
wash-NmLz garment(-PL)
'Clothes which will be or are to be washed'
(212) sád-na tfà
kill-Nmlz bird
'Bird which will be or is to be killed (by someone)'
(213) Jik-na knáyba
die-nmlz house
'House which will be or are destroyed (by someone)'
(214) mi-sin-na là:

NEG-finish-NMLZ work
'Work which will not be get finished'

## Appendix 3A: Classical Tibetan Verb Stems and Their Correspondences in Navakat

To some extent the Navakat verb forms reflect the stem formation of Old and Classical Tibetan. The verb stem system of Classical Tibetan (CT) can be described in broad outline as follows: ${ }^{90}$

The Classical Tibetan stem III (future stem) has become obsolete in all modern Tibetan varieties.

Classical Tibetan consonant alternations (eg. $k^{h}$ vs. $k$ ) are levelled out, typically towards stem II (past stem) and implicitly also towards the former stem III.

Classical Tibetan vowel alternations between stem I (present stem) and stem II (or stem III) have been levelled (exception: CT byed), typically towards stem II.

The - $d$ suffix of the Classical Tibetan stem I may or may not be preserved in certain tense and modal forms in Navakat. In a few cases, it also appears where the attested Classical Tibetan verb does not have any such suffix, e.g. CT rko ‘dig'.

Hence almost all Navakat verbs with an originally closed syllable root, apart from the imperative forms, correspond to the Classical Tibetan stem II, minus its prefix and suffix. And, in most, but not all cases, they thus also correspond to stem iII minus their prefixes. One exception is the verb lèndza 'to take', which corresponds to the Classical Tibetan stem I.

| CT root | Navakat correspondence | Stem I | Stem II | Stem III | Stem IV |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CT lta 'look at' |  | lta | b-lta-s | $b$-lta | lto-s |
|  | Navakat ta | tá- | tá-e- | - | tó-e |
| CT $z a$ 'eat' |  | $z a$ | zo-s | - | zo |
|  | Navakat sà | $s a^{-}$ | sò-e- | - | sò |
| CT rtse 'play' |  | rtse | $b$-rtse-s | $b$-rtse | $r$ tse-s |
|  | Navakat tsé 'dance, play' | tsé | tsé-e- | - | tsé-e |
| CT khru 'wash, bathe' |  | khru-d | b-kru-s | $b-k r u$ | khru-s |
|  | Navakat tú | tú-t- | tú-i- | - | tú-i |
| CT sba 'hide' |  | sbe-d | sba-s | $s b a$ | sbo-s |
|  | Navakat $b a$ | $b$ à-t- | $b \grave{a}-e$ - | - | bò-e |

[^56](cont.)

| CT root | Navakat correspondence | Stem I | Stem II | Stem III | Stem IV |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CT rmo 'plough' |  | rmo-d | rmo-s | rmo | rmo-s |
|  | Navakat mó | mó-ø- | mó-e- | - | mó-e |
| CT rko 'dig, carve' |  | rko-ø | b-rko-s | $b$-rko | rko-s |
|  | Navakat kó | kó-t- | kó-e- | - | kó-e |
| CT bya 'do' |  | bye-d | bya-s | bya | byo-s |
|  | Navakat pè | $p \grave{e}-t$ - | têej- | - | $t i$ |

In the case of the last verb, the split-palatalisation rule of West Tibetan (labial plus glide > palatal affricate only before back vowels, loss or neutralisation of the palatal glide before front vowels) has yielded these seemingly unrelated forms.

After an open syllable root, the Classical Tibetan -s suffix of stem iI and IV (imperative stem) becomes $-e$ or $-i$ in the Navakat past tense, resulting in a diphthong after back vowels ( $-a e,-o e,-u i$ ) and to a lengthening of the front vowels ( $e_{i}, i_{i}$ ):

|  | PSt.EGO | PRS.EGO | FUt.EGO |
| :--- | :--- | :--- | :--- |
| sàdza 'to eat' | sòe-van | sà-at | sàn |
| módza 'to plough' | móe-van | mó-at | mó-an |
| zódza 'to make' | zòe-van | zò-at | zó-an |
| tútfa 'to wash' | túí-van | tút-at | tú-kan |
|  |  |  |  |
| kíldza 'to sweep' | kíl-an | kíl-at | kíl-khan |
| t'átfa 'to cut' | tát-an | tát-at | tát-an |
| táktfa 'to break' | ták-pan | tá-at | ták-an |

Appendix 3B: Navakat Basic Vocabulary<br>(by Anju Saxena and Padam Sagar)

This is the Navakat IDS/LWT list. It has been compiled on the basis of the 1,310 items of the original Intercontinental Dictionary Series concept list (Borin et al. 2013) plus the 150 items added to it in the Loanword Typology project, for a total of 1,460 concepts (Haspelmath and Tadmor 2009). However, some IDS/LWT items have been left out from this list, as there were no equivalents in Navakat or there were gaps in our material. The resulting list as given below contains 1,135 items (concepts). The list also includes loanwords.

## 3B. $1 \quad$ Notational Conventions

For ease of comparison we have kept the original IDS/LWT glosses unchanged in all cases, and Navakat senses which do not fit the IDS/LWT meaning completely are given more exact glosses in the Navakat column. Sometimes there will be multiple (separately glossed) items in the Navakat column when Navakat exhibits lexical differentiation of meaning or form within an IDS/LWT item. Pronunciation or form variants are separated by commas, and formally distinct items are separated by semicolons. Glosses and notes belong with their enclosing "semicolon grouping".

## 3B. 2 The Navakat IDS/LWT List

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| So1.100 | the world | zèmbulin |
| Sol. 210 | the land | sáza |
| Sol. 212 | the soil | $t^{h}$ áva |
| Sol. 213 | the dust | pùtfur |
| So1.214 | the mud | ${ }^{\text {ndàmbak }}$ |
| Sol. 215 | the sand | pèma |
| So1.220 | the mountain | là |
| Sol. 222 | the cliff | $p^{\text {áálon }}$ |
| Sol. 230 | the plain | $t^{\text {háápa 'plain; plateau' }}$ |
| Sol. 240 | the valley | lùvba |
| So1.270 | the shore | $t^{h}{ }^{\text {a }}$ |
| So1.280 | the cave | $p^{h} u$ in |

(cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| So1.310 | the water | $t^{h} \dot{u} ; i^{\text {a }}{ }^{\text {1 }}$ |
| Sol. 320 | the sea | gjàts ${ }^{\text {o }}$ |
| So1.322 | calm | zànbo |
| So1. 323 | rough(2) | tákpo |
| So1. 324 | the foam | bòa |
| So1.330 | the lake | ts ${ }^{\text {có }}$ |
| Sol.360 | the river | tsá:np ${ }^{\text {o }}$ |
| So1.370 | the spring | $t^{\text {h }}$ úmik |
| So1.390 | the waterfall | bàmzar |
| Sol.410 | the woods or forest | djà̀gal, djàngol; ria |
| So1.430 | the wood | fín |
| So1.440 | the stone | dùa |
| Sol.450 | the earthquake | séngul |
| So1.510 | the sky | nám, námk ${ }^{\text {ha }}$ |
| Sol.520 | the sun | nima |
| So1.530 | the moon | ${ }^{n}$ dà:r |
| So1.540 | the star | kárma |
| So1.580 | the storm | ùrjuk |
| So1.590 | the rainbow | ${ }^{\text {nd }}$ dà |
| So1.620 | the darkness | mùnna |
| So1.630 | the shadow | $t^{\text {hipkja }}$ |
| So1.640 | the dew | silva |
| So1.710 | the air | lún |
| So1.720 | the wind | lágdai |
| So1.730 | the cloud | tín |
| So1.740 | the fog | múkpa |
| So1.750 | the rain | $t^{\text {ha }}$ áva |
| So1.760 | the snow | $k^{h} a^{\text {a }}$ |
| So1.770 | the ice | tàr |
| So1.7750 | to freeze | $k^{\text {híajaja }}$ |
| So1.780 | the weather | námla |
| Soi.810 | the fire | mè 'fire; flame' |
| So1.820 | the flame |  |

$91 t i$ is used in child-directed speech.
(cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| So1.830 | the smoke | tùtpa |
| So1.8310 | the steam | lấ:(n)fa |
| So1.840 | the ash | kò (k)tal |
| So1.841 | the embers | mèlo |
| Sol. 851 | to burn(1) | túktfa ${ }^{92}$ (Vol) |
| Sol. 852 | to burn(2) | tùktfa (general, nvol) |
| So1.860 | to light | túktfa |
| So1.861 | to extinguish | sátfa |
| So1.870 | the match | mètf |
| So1.890 | the charcoal | sóla: |
| So2.100 | the person | mi |
| So2.210 | the man | mi; phúza |
| So2.220 | the woman | $k^{h}$ 'mamo; áne 'father's sister; woman' |
| So2.230 | male(1) | $p^{h o ́}$ |
| So2.240 | female(1) | mò |
| So2.250 | the boy | tú: |
| So2.251 | the young man | $k^{h} o \hat{k} t$ õ ( $\eta$ ) |
| So2.260 | the girl | pòmo |
| So2.261 | the young woman | pòmo |
| So2.270 | the child(1) | tiva |
| So2.280 | the baby | tiva |
| So2.310 | the husband | mákpa |
| So2.320 | the wife | náma 'wife; bride' |
| So2.330 | to marry | pàklen tápḑa |
| So2.340 | the wedding | pàklen |
| So2.341 | the divorce | $t^{\text {háktfat }}$ |
| So2.350 | the father | áva |
| So2.360 | the mother | áma |
| So2.410 | the son | tú: |
| So2.420 | the daughter | pòmo |
| So2.430 | the child(2) | tiva |
| So2.440 | the brother | minbo, minbo |
| So2.444 | the older brother | ázo (thétpo), ázu (ty ${ }^{\text {hétpo }}$ ) |

92 The only difference between the vol and nvol form is in the tone.
(cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| So2.445 | the younger brother | $n \grave{o}(t f u n), n \grave{o}(t) u n)$ |
| So2.450 | the sister | tínmo |
| So2.454 | the older sister | áai ( $t^{\text {hétpo }}$ ) |
| So2.455 | the younger sister | nòmo(tutn), nòmo (tfun) ${ }^{93}$ |
| So2.456 | the sibling | mitin |
| So2.458 | the twins | ts ${ }^{\text {héma }}$ |
| So2.460 | the grandfather, old man | mème |
| So2.461 | the old man | gètpo; ${ }^{94}$ mème 'grandfather; old man' |
| So2.470 | the grandmother | évi, ávi |
| So2.4711 | the grandparents | gèngun |
| So2.471 | the old woman | gènmo |
| So2.480 | the grandson | tsháo |
| So2.510 | the uncle | ázã( $y$ ); ${ }^{\text {éu }}$ |
| So2.511 | the mother's brother | ázã( $\eta$ ) ${ }^{95}$ |
| So2.512 | the father's brother | éu |
| So2.520 | the aunt | áne; mèzõ( $\eta$ ) |
| So2.521 | the mother's sister | mèzõ( $\eta$ ) |
| So2.522 | the father's sister | áne |
| So2.530 | the nephew | tsháu |
| So2.540 | the niece, wife | tshámo |
| So2.5410 | the sibling's child | tsháu |
| So2.560 | the ancestors | gèndok |
| So2.570 | the descendants | $p^{\text {hado }}$ kp ${ }^{\text {a }}$ udok |
| So2.610 | the father-in-law (of a man) | ázã $^{\text {a }}$ ( $)$ |
| So2.611 | the father-in-law (of a woman) | ázã( $\eta$ ) |
| So2.620 | the mother-in-law (of a man) | áne |
| So2.621 | the mother-in-law (of a woman) | áne |

[^57](cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| So2.6220 | the parents-in-law | ázãjane |
| So2.630 | the son-in-law (of a man) | mákpa |
| So2.631 | the son-in-law (of a woman) | mákpa |
| So2.640 | the daughter-in-law (of a man) | tshámo; náma |
| So2.641 | the daughter-in-law (of a woman) | tshámo; náma |
| So2.710 | the stepfather | $p^{h a ́ j e r ~}$ |
| So2.720 | the stepmother | màjar |
| So2.750 | the orphan | tètuk |
| So2.760 | the widow | mòraymo |
| So2.770 | the widower | jùksa |
| So2.810 | the relatives | niriy |
| So2.820 | the family | péray |
| So2.910 | I | $\eta$ jà ( H towards listener); $m$ à |
| So2.920 | you (singular) | $k^{h}$ ón (H); $k^{h} j \underline{\text { g }}$ ( NH ) |
| So2.930 | he/she/it | $k^{h}$ ó ( NH ) |
| So2.940 | we | òn [1 PLI]; mà $\int a k$, nèt [1 PLE] |
| So2.941 | we (inclusive) | òn |
| So2.942 | we (exclusive) | màjak, nèt |
| So2.950 | you (plural) | $k^{h o ́ o d z a k, ~ k h o ́ n f a k ~(H) ~}$ |
| So2.960 | they | $k^{h}$ Ófak (H); $k^{h}$ óvat ( NH ) |
| So3.110 | the animal | gélḑu; sémtfen |
| So3.120 | male(2) | $p^{h o ́}$ |
| So3.130 | female(2) | mò |
| So3. 150 | the livestock | gèlzu: |
| So3.160 | the pasture | ria |
| So3.180 | the herdsman | lùkzi |
| So3.190 | the stable without a roof | tára |
| So3.200 | the cattle | gè̀lzu: |
| So3.220 | the ox | lếũ(n) |
| So3.230 | the cow | pàlay |
| So3.240 | the calf | pèo |
| So3.250 | the sheep | lùk |
| So3.260 | the ram | $k^{\text {hálva }}$ |
| So3.280 | the ewe | màmo |

(cont.)

| Id Gloss | Navakat |
| :--- | :--- |


| So3.290 the lamb | lù: |
| :---: | :---: |
| So3.320 the boar | $p^{\text {hák }}$ |
| So3.340 the sow | $p^{\text {hák }}$ |
| So3.350 the pig | $p^{\text {hák }}$ |
| So3.360 the goat | ràma |
| So3.420 the stallion | tápo, tá |
| So3.440 the mare | támo |
| So3.450 the foal | tétuk |
| So3.460 the donkey | pồ: |
| So3.470 the mule | tìu |
| So3.500 the fowl | tâvo |
| So3.520 the cock/rooster | tà̀o |
| So3.540 the hen | tầmo |
| So3.550 the chicken | tà |
| So3.570 the duck | tălõ( $\eta$ ) |
| So3.580 the nest | tsán |
| So3.581 the bird | tà |
| So3.584 the eagle | lák |
| So3.585 the hawk | $t^{h}{ }^{\text {á }}$ |
| So3.586 the vulture | tárgut |
| So3.592 the parrot | tóta |
| So3.593 the crow | kàktse |
| So3.610 the dog | $k^{h i}$ |
| So3.614 the rabbit | rivõ( $y$ ) 'rabbit; hare' |
| So3.620 the cat | púfi |
| So3.630 the rat | pia |
| So3.650 the fish | nà; mà ${ }^{\text {f/ }}$ li |
| So3.730 the bear | bà:lu |
| So3.740 the fox | àtse |
| So3.760 the monkey | tíu, téu |
| So3.770 the elephant | lápboti |
| So3.780 the camel | ù:nt |
| So3.810 the insect, worm | ${ }^{n}$ ù |
| So3.811 the head louse | fik |
| So3.8112 the body louse | fik |
| So3.813 the flea | $\left({ }^{n}\right)$ dềo |

(cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| So3.815 | the scorpion | dikpa ràtfu |
| So3.816 | the cockroach | màt ${ }^{\text {har }}$ |
| So3.817 | the ant | timajbu |
| So3.818 | the spider | tórajbu |
| So3. 819 | the spider web | ts ${ }^{\text {háa }}$ ( $n$ ) |
| So3.820 | the bee | sérnbu |
| So3.822 | the beehive | tsháa: $(n)$ |
| So3.830 | the fly | ${ }^{n}$ ) dè̀ |
| So3. 832 | the mosquito | màt ${ }^{\text {har }}$ |
| So3.8340 | the termites | fín thárambu |
| So3.840 | the worm | $\left.{ }^{( }{ }^{n}\right) b u$ 'worm; insect' |
| So3. 850 | the snake | ${ }^{n}$ dyl, ${ }^{\text {ndù }}$ |
| So3.8630 | the hare | rivõ( $y$ ) 'rabbit; hare' |
| So3.8650 | the quail | tákpa |
| So3.8800 | the kangaroo | kápga:ru |
| So3.9170 | the buffalo | $b$ bès, bè̀s |
| So3.920 | the butterfly | $p^{h}$ éma láptse |
| So3.930 | the grasshopper | àgbu |
| So3.960 | the lizard | nàktara |
| So3.970 | the crocodile or alligator | màgarmaty ${ }^{\text {n }}$ |
| So3.980 | the turtle | kát ${ }^{\text {f }}$ ua |
| So4.110 | the body | zúpho |
| So4.120 | the skin or hide | pát $(n) p^{h} o$ |
| So4.140 | the hair | tá |
| So4. 142 | the beard | $k^{h}$ épu 'beard; moustache' |
| So4. 144 | the body hair | pú |
| So4.145 | the pubic hair | pú |
| So4. 146 | the dandruff | lókfu |
| So4.150 | the blood | $t^{\text {hák }}$ |
| So4.151 | the vein or artery | sá 'vein; artery; grass' |
| So4.160 | the bone | rù:gok |
| So4.162 | the rib | tsíu |
| So4.170 | the horn | ràto |
| So4.180 | the tail | jáma |
| So4.190 | the back | kùn |
| So4.191 | the spine | gùt ${ }^{\text {civa }}$ |

(cont.)

| Id Gloss | Navakat |
| :--- | :--- |


| So4.200 the head | $\left({ }^{\text {a }}\right.$ ) gò 'top; peak; head' |
| :---: | :---: |
| So4.202 the skull | kùrzok |
| So4.203 the brain | látpa |
| So4.204 the face | jòdo( $\eta$ ) |
| So4.205 the forehead | tála |
| So4.207 the jaw | ${ }^{n}$ dàm |
| So4.208 the cheek | ${ }^{n}$ dàmba |
| So4.210 the eye | mik |
| So4.212 the eyebrow | mikpu |
| So4.214 the eyelash | mikpu |
| So4.215 to blink | miktsup gjèptfa |
| So4.220 the ear | námdzok |
| So4.222 the earwax | návorok |
| So4.230 the nose | ná |
| So4.231 the nostril | néhõy |
| So4.240 the mouth | $k^{h}{ }^{\text {á }}$ |
| So4.241 the beak | $k^{h}{ }^{\text {á }}$ |
| So4.250 the lip | $t^{\text {húto }}$ |
| So4.260 the tongue | té |
| So4.271 the gums | nil |
| So4.300 the shoulder | púyba |
| So4.310 the arm | làkpa |
| So4.312 the armpit | kíliktse |
| So4.320 the elbow | $t^{\text {himozoy }}$ |
| So4.321 the wrist | làkpa |
| So4.330 the hand | làkpa |
| So4.331 the palm of the hand | làkthil |
| So4.340 the finger | $n_{z u \text { ù:n }}$ |
| So4.342 the thumb | $t^{\text {hévots }}{ }^{\text {h }}$ i |
| So4.344 the fingernail | sénmo |
| So4.345 the claw | tántse |
| So4.350 the leg | káyba |
| So4.351 the thigh | $l^{\prime}{ }^{\text {a }}$ áfa |
| So4.352 the calf of the leg | gitpa |
| So4.36o the knee | pímo |
| So4.370 the foot | kágba; $\int a ̀ p$ (н) |

(cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| So4.371 | the ankle | káytshiva |
| So4.372 | the heel | tígba |
| So4.374 | the footprint | fàpzej |
| So4.380 | the toe | kíntil |
| So4.392 | the wing | fúkpa |
| So4.393 | the feather | pú |
| So4.400 | the chest | tà |
| So4.410 | the breast | évu |
| So4.420 | the udder | évu |
| So4.430 | the navel | tija |
| So4.4310 | the belly | tòtpa |
| So4.440 | the heart | níp; sémba 'mind; heart' |
| So4.441 | the lung | lóa |
| So4.451 | the kidney | $k^{\text {hálma }}$ |
| So4.460 | the stomach | tòtpa, tòtpa |
| So4.461 | the intestines or guts | gjùma 'intestines; sausage' |
| So4.462 | the waist | kétpa |
| So4.463 | the hip | tốn $n$ )to |
| So4.464 | the buttocks | tớ( $n$ )to |
| So4.470 | the womb | pùinut |
| So4.490 | the testicles | likpa |
| So4.492 | the penis | kóto |
| So4.4930 | the vagina | kúp |
| So4.510 | to breathe | úlèndza |
| So4.520 | to yawn | jàl lènoţa; kjófat lèndza, kjófat lènḑa |
| So4.530 | to cough | littpa lùtfa, lòtpa lùtfa |
| So4.540 | to sneeze | ditpa lèndza |
| So4.550 | to perspire | tshátpa tónḑ̧a |
| So4.560 | to spit | thímak pódza |
| So4.570 | to vomit | kjúktfa |
| So4.580 | to bite | sóa gjèptfa |
| So4.590 | to lick | ${ }^{\text {ndàktja }}$ |
| So4.591 | to dribble | $t^{\text {híifa }}$ òydja |
| So4.610 | to sleep | jàldza |
| So4.612 | to snore | húida lèndsa |

(cont.)

| Id Gloss | Navakat |
| :---: | :---: |
| So4.620 to dream | miklam ò ${ }^{\text {d }}$ ¢ $a^{96}$ (NVOL) |
| So4.630 to wake up | là̀: $\int a$ (INTR) |
| So4.640 to fart | tùkritáydza |
| So4.650 to piss | tivi tándsa |
| So4.660 to shit | kjákpa tápdsa |
| So4.670 to have sex | gjùdza |
| So4.680 to shiver | ${ }^{\text {nda }}$ dàrtfa |
| So4.690 to bathe, wash | tútja |
| So4.720 to be born | kédz̧a (NH); thúpdža (H) |
| So4.730 pregnant | tòtpala tú: |
| So4.732 to conceive | tú: khíjanfa |
| So4.740 to be alive | sónpo òtfa |
| So4.7410 the life | mits ${ }^{\text {he }}$ ¢t ${ }^{\text {héva }}$ |
| So4.7501 dead | firo ( NH ), dua ( H ) |
| So4.750 to die | fíḑa $(\mathrm{NH})$; tòndza ( H ) |
| So4.751 to drown | dùrtfa, tùrtfa (NVOL) |
| So4.760 to kill | sáta |
| So4.770 the corpse | firo |
| So4.78o to bury | kúydza |
| So4.810 strong | féten |
| So4.820 weak | ritpa |
| So4.830 healthy | gjàp ${ }^{\text {a }}$, gjàfa |
| So4.841 the fever | tòt |
| So4.843 the cold | tàymo |
| So4.8440 the disease | nàza |
| So4.850 the wound | má |
| So4.853 the swelling | bòep ${ }^{\text {º }}$ |
| So4.8541 to scratch | dàrtfa |
| So4.854 the itch | sàvun, sèv*n |
| So4.855 the blister | $t^{\text {hu}}$ úgã: |
| So4.856 the boil | fóa |
| So4.857 the pus | nák |

96 The folk etymology of this is mik 'eye' + làm 'path' > 'dream ( N )'. In other dialects the final $k$ in 'eye' does not occur. mik in other dialects is realized as $r m e$, $m e$ or $m i$, etc.
(cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| So4.870 | the physician | dògdar ( M ); dagdarni ( F ) |
| So4.880 | the medicine | mán |
| So4.890 | the poison | tùk |
| So4.910 | tired | túktf ${ }^{\text {at }}$ |
| So4.912 | to rest | jàl sódza |
| So4.920 | lazy | áret tiòt |
| So4.930 | bald | káthak |
| So4.940 | lame | fàu |
| So4.950 | deaf | kól 'deaf; mute' |
| So4.96o | mute | kól 'deaf; mute' |
| So4.970 | blind | fàra |
| So4.990 | naked | tírgok |
| So5.110 | to eat | sàḑa |
| So5. 120 | the food | sèptuŋ ${ }^{97}$ |
| So5.121 | cooked | kólma |
| So5. 123 | ripe | tóeva |
| So5. 124 | unripe | matóeva |
| So5. 125 | rotten | rùlva; fúrva |
| So5.130 | to drink |  |
| So5.140 | to be hungry | tókri òyḑa |
| So5. 141 | the famine | $t^{\text {háma }}$ |
| So5.150 | to be thirsty | kómdi òydja (NVOL) |
| So5.160 | to suck | ${ }^{( }{ }^{n}$ )djiptfa |
| So5.180 | to chew | ${ }^{\text {ndàtfa }}$ |
| So5.181 | to swallow | miktfa |
| So5.190 | to choke | ú: thúk pétfa |
| So5.210 | to cook | kóldga(vol) |
| So5.220 | to boil | kòlḑa ${ }^{98}$ (NVOL) |
| So5. 230 | to roast or fry | lámdza |
| So5.240 | to bake | táktfa |
| So5. 250 | the oven | $t^{\text {háp }}$ ka |
| So5.260 | the pot | háfay 'saucepan' |

97 < za-btuy [food-drink].
98 The only difference between the vol and nvol form is in the tone.
(cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| So5.280 | the pan | nèruma |
| So5.310 | the dish, saucepan | tálak |
| So5.320 | the plate | $t^{\text {héli }}$ |
| So5.330 | the bowl | gom |
| So5.340 | the jug/pitcher | dsàg |
| So5.350 | the cup | kárjıl; káp |
| So5.370 | the spoon | thúrma |
| So5.380 | the knife(1) | $t i, d i$ |
| So5.390 | the fork | tshérma: |
| So5.410 | the meal | $t^{\text {háktuk }}$ |
| So5.430 | the lunch | ${ }^{n} z a ̀$ àra |
| So5.460 | to peel | (kómbo) fúḑa |
| So5.470 | to sieve or to strain | tsáktfa |
| So5.480 | to scrape, rub | dàrtfa |
| So5.510 | the bread | púli 'fried bread'; ròti 'chapati' |
| So5.530 | the dough | pàkzan |
| So5.540 | to knead | zù̀ dja |
| So5.550 | the flour | pàkpe |
| So5.560 | to crush, to grind or to beat | dù̀dza |
| So5.610 | the meat | fá |
| So5.630 | the sausage | gjùma 'intestines; sausage' |
| So5.640 | the soup | $t^{\text {húkpa }}$ (traditional) |
| So5. 650 | the vegetables | ts hónma; sábdgi, sábzi |
| So5.700 | the potato | hèlu |
| So5.712 | the bunch | piktse |
| So5.760 | the grape | gùn |
| So5.770 | the nut | bèdarm 'nut; almond' |
| So5.790 | the oil | mèrku |
| So5.791 | the grease or fat | $t^{\text {hillu }}$ |
| So5.810 | the salt | tshá |
| So5.821 | the chili pepper | pivili |
| So5.840 | the honey | féhad, féhad |
| So5.850 | the sugar | tíni |
| So5.860 | the milk | òma |
| So5.880 | the cheese | $t^{\text {húra }}$ |
| So5.890 | the butter | màr |

(cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| So5.920 | the wine | árak |
| So5.930 | the beer | $t^{\text {hág }}$ |
| So5.940 | the fermented drink | árak; thág |
| So5.970 | the egg | gùã |
| So6.110 | to put on | kónḑ a (TR, non-reflexive object) |
| So6.120 | the clothing or clothes | kòelak, kòelak |
| So6.130 | the tailor | $t^{\text {chémbua (m, F) }}$ |
| So6.210 | the cloth | kòelak, kòelak |
| So6.220 | the wool | bàl |
| So6.240 | the cotton | sút; rè: |
| So6.250 | the silk | rèfam, rèjãm |
| So6.270 | the felt | bérgi |
| So6.280 | the fur | pú |
| So6.290 | the leather | kúa |
| So6.320 | the spindle | $p^{h}$ áy |
| So6.340 | the loom | táfa |
| So6.350 | to sew | túktfa (by hand); témḑ̧a (by machine) |
| So6.360 | the needle(1) | $k^{h} a ́ p$ |
| So6.380 | the thread | kútpa |
| So6.390 | to dye | tshóe gjèptfa |
| So6.410 | the cloak | kòe |
| So6.420 | the (woman's) dress | pòmoi kòelak |
| So6.440 | the shirt | rague |
| So6.450 | the collar | kòã |
| So6.480 | the trousers | sú:thon |
| So6.490 | the sock or stocking | kínfu |
| So6.510 | the shoe | lám |
| So6.520 | the boot | bùt |
| So6.540 | the shoemaker | mòtfi |
| So6.550 | the cap | Sêu |
| So6.570 | the belt | bèlt (modern) |
| So6.58o | the glove | làkJu: |
| So6.610 | the pocket | $k^{h}$ íso |
| So6.620 | the button | $t^{\text {húptgi }}$ |
| So6.630 | the pin | $k^{h}$ áp |
| So6.710 | the ornament or adornment | tákta |

(cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| So6.720 | the jewel | júthùru ${ }^{99}$ |
| So6.730 | the ring | súrturp, sṫrtup |
| So6.740 | the bracelet | ${ }^{n} d \tilde{u}^{\text {a }}$ |
| So6.750 | the necklace | hà:r |
| So6.760 | the bead | $t^{\text {héjã: }}$ |
| So6.770 | the earring | kóndzu( $y$ ) |
| So6.810 | the handkerchief or rag | rùma:l |
| So6.820 | the towel | tólija: |
| So6.910 | the comb | káygi: |
| So6.920 | the brush | brùt, bùruf |
| So6.921 | the plait/braid | lènbu |
| So6.940 | the ointment | mán |
| So6.950 | the soap | sábun |
| So6.960 | the mirror | mèlõ( $\eta$ ) |
| So6.9800 | the snowshoe | bùt |
| So7.110 | to live | dètfa |
| So7.120 | the house | $k^{h} a ́ y b a$ |
| So7.140 | the tent | kùr |
| So7.150 | the yard or court | ràpsal |
| So7.210 | the room | này |
| So7.220 | the door | gò |
| So7.231 | the latch or door-bolt | gùlik; títkeni |
| So7.2320 | the padlock | gùltfa |
| So7.240 | the key | kúlik |
| So7.250 | the window | kírkuy |
| So7.260 | the floor | sáza 'surface; floor' |
| So7.270 | the wall | ${ }^{\text {ndàn }}$ |
| So7.310 | the fireplace | tákthap ${ }^{100}$ (made of iron); $t^{h a ́ p(k a) ~(m a d e ~}$ of stone) |
| So7.330 | the chimney | ${ }^{\text {ndòjmo }}$ |
| So7.370 | the ladder | thémba |
| So7.420 | the bed | nàlsa |

99 jú-th ${ }^{h} u ̀ r u$ [a.kind.of.green.gemstone-another.kind.of.gemstone].
100 Fireplaces made of stone used to be more common earlier, but they are now being replaced by iron fireplaces.
(cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| So7.421 | the pillow | ŋá:e |
| So7.422 | the blanket | kámbal |
| So7.430 | the chair | kúrsi |
| So7.450 | the lamp | bámba (traditional) |
| So7.460 | the candle | mòmbatti |
| So7.470 | the shelf | táktak |
| So7.480 | the trough | tólvuk |
| So7.510 | the roof | tá̛: $(n)$ |
| So7.550 | the beam | ká: |
| So7.56o | the post or pole | ká: |
| So7.570 | the board | pấ:lep |
| So7.580 | the arch | ${ }^{\text {nda }}$ |
| So7.610 | the mason | mistri |
| So7.620 | the brick | ìnt |
| So7.630 | the mortar(2) | màsa:la |
| So7.6500 | the camp | dèra: |
| So8.110 | the farmer | Jigba |
| So8.120 | the field | Jinga; sá 'plot of land' |
| So8.1210 | the paddy | dàm |
| So8.130 | the garden | tsháera 'garden; orchard' |
| So8.160 | the fence | kjóra; rá |
| So8.170 | the ditch | jùra |
| So8.210 | to plough/plow | fín módza |
| So8.220 | to dig | kótfa |
| So8.250 | the hoe | mòntok |
| So8.260 | the fork(2)/pitchfork | tshérma: |
| So8.270 | the rake | làgkã: |
| So8.2900 | the lasso | $t^{\text {tà }}$ kpa |
| So8.311 | the seed | sáyon, sáyøn |
| So8.340 | to thresh | phúpma tóndza |
| So8.350 | the threshing-floor | úndak |
| So8.420 | the grain | nà̀e |
| So8.430 | the wheat | tò |
| So8.440 | the barley | nè: |
| So8.450 | the rye | sóa |
| So8.470 | the maize/corn | $t^{\text {hálli }}$ |



[^58](cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| Sog.160 | to tie | dàmḑa |
| Sog. 161 | to untie | lúktfa (TR); lùktfa (INTR) ${ }^{102}$ |
| Sog.180 | the chain | tákthak |
| Sog. 190 | the rope | $t^{\text {ták }}$ cpa |
| Sog. 192 | the knot | ${ }^{n}$ dytpa |
| Sog. 210 | to strike | $t^{\text {túktfa }}$ |
| Sog. 211 | to pound, beat | dùŋdz̧a |
| Sog. 220 | to cut | táktfa (TR) 'to cut; to break; to damage'; tfàtfa (INTR) 'to cut; to break; to damage' ${ }^{103}$ |
| Sog. 222 | to chop | túptfa |
| Sog. 223 | to stab, penetrate | gjùtfa, gztfa |
| So9.230 | the knife(2) | ti, di |
| Sog. 240 | the scissors or shears | kéntic: |
| Sog. 250 | the axe/ax | téri |
| Sog. 251 | the adze | à̀ra |
| Sog.260 | to break | táktfa (TR) 'to cut; to break; to damage'; tfàtfa (INTR) 'to cut; to break; to damage' ${ }^{104}$ |
| Sog. 261 | broken | ták pórkan |
| So9. 270 | to split | fáktfa (TR) |
| Sog.280 | to tear | $t^{\text {hima }}$ dak tốdja |
| So9.290 | to skin | pá:fo fúḑa, pá:fo fútu̧a |
| So9.310 | to rub | dàrtfa |
| So9.3110 | to wipe | pítja |
| So9.320 | to stretch | $t^{\text {héndza }}$ (vol) |
| Sog. 330 | to pull | $t^{\text {héndja }}$ |
| So9.340 | to spread out | tíydja |
| So9.341 | to hang up | tónton la tándza |
| So9.342 | to press | nándz̧a |
| So9.343 | to squeeze | tsírta |
| So9.350 | to pour | tưktfa |
| Sog.360 | to wash (clothes, etc.) | tútfa |
| So9.370 | to sweep | kílḑa |

[^59]| Id Gloss | Navakat |
| :---: | :---: |
| So9.380 the broom | dsà: ${ }^{\text {a }}$ |
| So9.422 the tool | làkta |
| So9.430 the carpenter | mistri |
| Sog.440 to build | zà ${ }^{\text {d }}$ dza ( H$) ;$ zòdza ( NH ) |
| Sog.461 to hollow out | mía púktfa |
| Sog.480 the saw | à:ri |
| Sog.490 the hammer | thóro |
| Sog.610 to forge | zòkdza |
| Sog.620 the anvil | kámpa |
| Sog. 630 to cast | túktfa |
| Sog.640 the gold | sér |
| Sog. 650 the silver | múl |
| Sog.660 the copper | sấ: |
| Sog.670 the iron | ták |
| Sog.68o the lead | fél |
| So9.690 the tin or tinplate | tín |
| So9.730 the clay | $t^{\text {hàva }}$ |
| So9.740 the glass | fél |
| So9.760 the basket | pàktse |
| So9.790 the fan | páykha: |
| Sog.810 to carve | sòktfa |
| Sog.830 the statue | kúnda |
| Sog. 840 the chisel | $t^{\text {héni }}$ |
| Sog.880 the paint | ràyg |
| Sog.890 to paint | tík gjèptfa 'to paint (a picture)' |
| So9.90oo to draw water | $t^{\text {h}}{ }^{\text {u }} t^{h}$ énds $a$ |
| Sog.9100 the peg | $\left({ }^{n}\right)$ dínbu |
| S10.110 to move | ${ }^{n}$ )gùlḑa (to push slightly); pùldza (to push with force) |
| S10.130 to turn around | lòktfa 'to turn around; to return' |
| S10.140 to wrap | tildga |
| S10.150 to roll | $\left({ }^{n}\right)$ dildga |
| S10.160 to drop | dénkjel pèta |
| S10.170 to twist | $\left({ }^{n}\right)$ gùlḑ̧a |
| S10.210 to rise | là̀: $\int a ;$ fártfa 'to rise (sun, moon)' |
| S10.220 to raise or lift | táktfa |

(cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| S10.230 | to fall | ${ }^{n}$ dildga |
| S10.240 | to drip | $t^{\text {híifa }}$ òjdza |
| S10.250 | to throw | timdza, dimdja |
| S10.252 | to catch | zùmdza |
| S10.260 | to shake | $\left({ }^{( }\right)$gùlḑa |
| S10.320 | to flow | ${ }^{\text {ndòdja }}$ |
| S10.330 | to sink | dùrtfa, tùrtfa (INTR) |
| S10.340 | to float | $\left.{ }^{( }\right)$diydja |
| S10.350 | to swim | táli gjèptfa |
| S10.351 | to dive | $t^{h}$ óndza |
| S10.352 | to splash | tórtfa ${ }^{105}$ (TR) |
| S10.370 | to fly | $p^{h}$ úrtfa |
| S10.380 | to blow | fà: $\int a^{106}$ (INTR) |
| S10.410 | to crawl | gùrma gjèptfa |
| S10.412 | to kneel | puımo tsúkfa |
| S10.413 | to crouch | $k^{h} \hat{o} f a$ |
| S10.420 | to slide or slip | ${ }^{\text {ndètfa }}$ |
| S10.430 | to jump | $t^{h}$ ónd5a |
| S10.431 | to kick | dòkril gjèptfa |
| S10.440 | to dance, play | tsédza |
| S10.450 | to walk | ${ }^{\text {nduàldga }}$ |
| S10.451 | to limp | fàu $t^{\text {hág }}$ dza, fàu thoŋdza |
| S10.460 | to run | fórtfa |
| S10.470 | to go | ${ }^{n}$ dòdza ( NPST ), pùt ( PST ) |
| S10.471 | to go up | jàjala ${ }^{n} d o ̀ d z a$ (in that direction) [up.Loc go.inf]; tákpa la ndòdza (on a path over there) |
| S10.472 | to climb | ${ }^{n} d z a ̀ k t f a$ |
| S10.473 | to go down | màmala ndònḑa 'to go down; to go downward' |
| S10.474 | to go out | $p^{\text {hit }}$ tala tòndsa, $p^{\text {hitala }}{ }^{(n)}$ dòndza, $p^{\text {hítala }}$ tòndja |
| S10.480 | to come | òydja |

[^60](cont.)

| Id | Gloss | Navakat |
| :--- | :--- | :--- |


| S 10.481 to come back | lòktfa òydza |
| :---: | :---: |
| S10.490 to leave | táydza 'to leave; to let go of' |
| S10.491 to disappear | kjàldza (NVOL) |
| S10.510 to flee | fórtfa, fúrtfa |
| S10.520 to follow | $\left({ }^{n}\right)$ gàpla $\left.{ }^{( }{ }^{\prime}\right)$ dòdza |
| S10.530 to pursue | zúmdu ndódja |
| S10.550 to arrive | léptfa (Nн) |
| S10.56o to approach | léptfa (NH) |
| S 10.570 to enter | nàjla ${ }^{\text {n }}$ dòdza |
| S10.580o to go | ${ }^{n}$ dòdza ( NH ) |
| S 10.610 to carry | $t^{h}$ àktja (nvol) |
| S 10.612 to carry in hand | làkpa ray tàktfa |
| S10.613 to carry on shoulder | púpbaray tàktfa |
| S10.615 to carry under the arm | làkpe: gàptu tàktfa, làkpigàptu tàktfa |
| S10.620 to bring | $k^{h} u$ úr òjdza 'to bring; to carry'; $k^{h e ́ r t f a ~ ' t o ~}$ bring; to take away' |
| S10.630 to send | kúrtfa |
| S10.640 to lead | ${ }^{\text {ngòva pètfa }}$ |
| S10.66o to ride | fó òndza |
| S 10.670 to push | $p^{\text {húldga }}$ |
| S10.710 the road | sólok |
| S10.720 the path | làm |
| S10.740 the bridge | sàmba |
| S10.750 the cart or wagon | gà $\mathrm{c}^{i}$ |
| S10.760 the wheel | $k^{\text {hórlo }}$ |
| S10.810 the ship | $t^{\text {h }}$ íi dJà ${ }^{\text {a }}$ hads |
| S10.831 the canoe | dòna: |
| S 10.840 the raft | rà:ft, rà:pt |
| S10.850 the oar | táppu |
| S10.890 the anchor | làngar |
| S11.110 to have | òtfa |
| S11.120 to own | zindak tònḑa |
| S11.130 to take | $k^{h} u$ írta; lènds a |
| S 11.140 to grasp | zùmdza 'to grasp; to hold' |
| S11.160 to get | $t^{\text {hóptfa }}$ |
| S11.170 to keep | pòrtfa |

(cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| S11.180 | the thing | tálak |
| S11.210 | to give | tértfa ( NH ), púldga ${ }^{\text {(H) }}$ |
| S11.220 | to give back | lóktfa |
| S11.250 | to rescue | tók lùndja 'to rescue; to give life; to blow life into' |
| S11.270 | to destroy | fiktfa, $\int i k t($ (j) $)$ ( NVOL ); $\operatorname{ikt}$ ( $(j) a(\mathrm{VOL})$ |
| S11.280 | to injure | nóttfa 'to injure; to hurt' |
| S11.2900 | to damage | táktfa (TR) 'to cut; to break; to damage'; tfàtfa (INTR) 'to cut; to break; to damage'; ${ }^{107}$ fikt(j)a |
| S11.310 | to look for | phátfa |
| S11.320 | to find | $p^{\text {hátfa }}$ |
| S11.330 | to lose | $p^{h}$ ámdza 'to lose, to be defeated' |
| S11.340 | to let go | ${ }^{\text {nd }}$ òru tfúktfa |
| S11.430 | the money | $\left.{ }^{( }\right)$ḑ̇̇̀u; múl |
| S11.440 | the coin | tấ:di |
| S11.510 | rich | $t^{\text {h }}$ úkpo |
| S 11.520 | poor | mètpo |
| S11.530 | the beggar | rèan |
| S11.540 | stingy | kándzu:s |
| S11.610 | to lend | $k i ̂ l n) d z a$ |
| S11.620 | to borrow | jártfa (non-consumable objects); kíndza (consumable objects) |
| S11.630 | to owe | púlon òtfa |
| S11.640 | the debt | kínbo |
| S 11.650 | to pay | tértfa |
| S11.660 | the bill | bil |
| S11.690 | the tax | $t^{\text {hál }}$ |
| S 11.770 | to hire | kíraela lènḑa |
| S11.780 | the wages | lá |
| S11.790 | to earn | káma:j zòdza ${ }^{108}$ |
| S11.810 | to buy | jòdza |
| S11.820 | to sell | tshóndza |
| S11.830 | to trade or barter | tshóv táydza |

[^61](cont.)

| Id Gloss | Navakat |
| :---: | :---: |
| S11.840 the merchant | tshópba ( $\mathrm{m}, \mathrm{F}$ ) |
| $\mathrm{S}_{11.850}$ the market | bàza:r |
| S11.860 the shop/store | dùka:n |
| S11.880 expensive | $k^{\text {nùunbo }}$ |
| S11.890 cheap | $k^{\text {hémo }}$ |
| S11.910 to share | gòtfa |
| S11.920 to weigh | kártfa |
| S12.0100 after | tín, tín 'later'; thène 'after; then; so'; $\left({ }^{n}\right)$ gàpla ${ }^{109}$ [low-LOC] 'after; below; beneath' |
| S12.0110 behind | gjèp |
| S12.0200 beside | ${ }^{\text {ndòru }}$ |
| S12.0300 down | jòk (direction) |
| S12.0410 in front of | ${ }^{\text {ndòru }}$ |
| S12.0500 inside | này |
| S12.0600 outside | $p^{\text {hita }}$ a |
| S12.0700 under | ${ }^{n}$ gàp |
| S12.08oo up | tá:n 'up; above; on top of' |
| S12.110 the place | sá |
| S12.120 to put | túktfa |
| S12.130 to sit | dètfa (NH), zù: $:$ a (H) |
| S12.150 to stand | kérker la là̀:fa |
| S 12.160 to remain | dètfa |
| S12.210 to gather | ${ }^{n}$ dùtfa, ${ }^{\text {ndy }}$ dyfa 'to gather, to collect' |
| S12.212 to pick up | dùtfa |
| S12.213 to pile up | púpdza |
| S12.220 to join | $t^{\text {hútfa }}$ |
| S12.240 to open | pèdza (INTR) |
| S12.26o to cover | káptfa |
| S12.270 to hide | bàtfa (TR) |
| S12.310 high |  |
| S12.320 low | mámô ${ }^{110}$ |

[^62](cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| S12.330 | the top | $\left({ }^{n}\right) g$ ò 'top; peak; head' |
| S12.340 | the bottom | táa |
| S12.350 | the end(1) | $\left.{ }^{( }\right)$dzùyma; tsấ:fo; tíyfo: |
| S12.352 | pointed, sharp | nònpo |
| S12.353 | the edge | nònpo |
| S12.360 | the side | ${ }^{\text {ndàn }}$ a |
| S12.370 | the middle | zùn |
| S12.410 | right(1) | jépha, jéfa |
| S12.420 | left | júnma |
| S12.430 | near | némo |
| S12.440 | far | $t^{\text {háákrin }}$ |
| S12.450 | the east | fár |
| S12.460 | the west | nùp |
| S12.470 | the north | tằ |
| S12.480 | the south | $l\left({ }^{\prime}\right)$ ú: |
| S12.540 | to measure | tàptfa |
| S12.550 | big | $t^{\text {heittpo }}$ 'big (ADJ); much (ADV)' |
| S12.560 | small | kúrkur (bent objects); tfyn, tfún (objects which are not elongated) |
| S12.570 | long | rippo |
| S12.580 | tall | rìo |
| S12.590 | short | tún |
| S12.610 | wide | fày |
| S12.620 | narrow | tòkpo |
| S12.630 | thick | dùmpo (round) 'thick; fat'; thúpo (objects which are not round) 'thick; fat' |
| S12.650 | thin | $t^{\text {hámo (round objects); tápo (flat objects) }}$ |
| S12.670 | deep | òptõ( $\eta$ ) |
| S12.710 | flat | téltel (surface) |
| S12.730 | straight | $t^{\text {hágbo }}$ |
| S12.740 | crooked | gùrkok |
| S12.750 | the hook | nèldgu |
| S12.760 | the corner | sùr, sùr |
| S12.780 | the square | tùpdzi |
| S12.810 | round | girgir (large objects); kírkir 'round; circle' (small objects) |


| Id Gloss | Navakat |
| :---: | :---: |
| S12.830 the ball | pólo 'ball, game' |
| S12.840 the line | rimo |
| S12.850 the hole | míay |
| S12.930 to change | dèptfa |
| S13.0100 one | tijk |
| S13.0200 two | ní: |
| S13.0300 three | súm |
| S13.0400 four | $3 i$ |
| S13.0500 five | já |
| S13.0600 six | tùk |
| S13.0700 seven | dỳn, dùn |
| S13.0800 eight | gjèt |
| S13.0900 nine | gù |
| S13.100 ten | tú |
| S13.101 eleven | tuukjik |
| S13.102 twelve | túnni: |
| S13.103 fifteen | téna |
| S13.104 twenty | níju |
| S13.105 a hundred | gjà |
| S13.106 a thousand | tón |
| S13.107 to count | tsiktfa (vol); tsiktfa (NVOL) ${ }^{111}$ |
| S13.140 all | sín |
| S13.150 many | jòp (CNT); màybo (NCNT) |
| S13.160 more | tùna: 'more; yet' |
| S13.170 few | kónbo |
| S13.180 enough | dènak |
| S13.181 some | tsitsi: |
| S13.190 the crowd | mimay |
| S13.210 full | kàykày |
| S13.220 empty | tónba |
| S13.230 the part, share | kála |
| S13.2310 the piece | súr, sṫr |
| S13.240 the half | $p^{\text {hét }}$ |

[^63](cont.)

| Id Gloss | Navakat |
| :---: | :---: |
| S13.330 only | lèm |
| S13.3310 alone | tikpo |
| S13.340 first | ${ }^{\text {ngòma }}$ |
| S13.350 last | $\left.{ }^{( }{ }^{n}\right)$ ḑùpma; tsấ: $/ 0 ;$ tínfo: |
| S13.360 second | níva |
| S13.370 the pair | djôri |
| S13.380 twice/two times | lèni: |
| S 13.420 third | súmba |
| S14.110 the time | $t^{\text {h}}$ ùzzt |
| S14.120 the age | lò |
| S14.130 new, fresh | sóma |
| S14.140 young | nèzup (нUм) |
| S14.160 early | ján |
| S14.170 late | $p^{\text {hímo }}$ |
| S14.180 now | tà |
| S14.190 immediately | tàksay |
| S14.210 fast | ${ }^{n}$ gjòp ${ }^{\text {a }}$, ${ }^{n}$ gjòfa |
| S14.220 slow | gùlerãy 'slow, slowly' |
| S14.230 to hurry | ${ }^{n} g j o ̀ p{ }^{\text {ha a pètfa }}$ |
| S14.240 to be late | $p^{h}{ }_{\text {cif }} / \mathrm{a}$ |
| S14.250 to begin | súktfa |
| S14.2510 the beginning | ${ }^{\text {ngòma }}$ |
| S14.252 to last | lùija |
| S 14.260 the end(2) | $\left.{ }^{( }{ }^{n}\right)$ ḑùnma; tsấ: $/ 0 ;$ tínfo: |
| S14.270 to finish | sindza |
| S14.280 to cease | kàktfa |
| S14.290 ready | $t^{\text {hóm }}$ |
| S14.310 always | mizej 'always; forever; life-long' |
| S 14.320 often | sírisak |
| S14.330 sometimes | nàmnàmre |
| S 14.331 soon | ${ }^{n}$ gjöfa |
| S14.332 for a long time | jùn rìnbo |
| S14.340 never | nàm ${ }^{\text {ngàn }}$ |
| S14.350 again | jàn |
| S 14.410 the day(1) | ${ }^{\text {ngòmajak }}$ |
| S 14.4110 the day(2) | jinmo |

(cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| S14.420 | the night | gòemo, gòemo |
| S14.430 | the dawn | nijar |
| S14.440 | the morning | nèrok |
| S14.450 | the midday | jinmo |
| S14.460 | the evening | $p^{\text {hírok }}$ |
| S14.470 | today | tirin |
| S14.480 | tomorrow | nàymo |
| S14.481 | the day after tomorrow | ná: |
| S14.490 | yesterday | ${ }^{n}$ dàn |
| S14.491 | the day before yesterday | $k^{\text {hénijak }}$ |
| S14.510 | the hour | gànta: |
| S14.610 | the week | dùn |
| S14.620 | Sunday | (zà) nima $^{112}$ |
| S14.630 | Monday | ${ }^{\text {nda }}$ dàva |
| S14.640 | Tuesday | minmar |
| S14.650 | Wednesday | lákpa |
| S14.660 | Thursday | $p^{h u ́ r o u, ~} p^{\text {huturvu }}$ |
| S14.670 | Friday | pásay |
| S14.680 | Saturday | pénba |
| S14.710 | the month | ${ }^{\text {nda }}$ à |
| S14.730 | the year | lò |
| S14.740 | the winter | gùnga |
| S14.750 | the spring(2) | pika |
| S14.760 | the summer | jàrka |
| S14.770 | the autumn/fall | tónga |
| S14.780 | the season | dòjtsøt, døetsot |
| S 15.210 | to smell(1) | tima òyḑa (NVOL) |
| $\mathrm{S}_{15.212}$ | to sniff | númdja (TR) |
| S 15.220 | to smell(2) | númdja (TR) |
| S15.250 | fragrant | tima ${ }^{113}$ |

[^64](cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| S15.26o | stinking | tima $^{114}$ |
| S15.310 | to taste | tshá nà̀ds ${ }^{\text {a }}$ |
| S15.360 | salty | tshéu |
| S15.370 | bitter | $k^{h}$ ánte |
| S15.380 | sour | túrmo, kjúrmo |
| S15.390 | brackish | tál $h$ )ar |
| S 15.410 | to hear | tshórtfa (NVOL) |
| S15.420 | to listen | jàḑa (VOL) |
| S15.440 | the sound or noise | kát |
| S 15.450 | loud | kúzõ( $\eta$ ) |
| S 15.460 | quiet | táme(j) |
| S 15.520 | to look | tádza 'to look; to observe' |
| S 15.550 | to show | tóndza |
| S 15.560 | to shine | òt gjèptfa |
| S15.570 | bright | tákpo 'bright; fierce (e.g. wind)' |
| S15.610 | the colour/color | rày (g) |
| S15.620 | light(2) | sálvo |
| S15.630 | dark | mùnna |
| S15.640 | white | kárvo |
| S15.650 | black | nàkpo |
| S15.66o | red | márvo |
| S15.670 | blue | ךǿnро, ŋónpo |
| S15.680 | green | $\left.{ }^{( }\right)$dsépu |
| S15.690 | yellow | sér(vo) |
| S15.710 | to touch | nùktfa |
| S 15.712 | to pinch | aktfa gjèptfa, sénto gjèptfa |
| S15.720 | to feel | nòksam táydza |
| S15.740 | hard | kjònbo |
| S15.750 | soft | nbòlmo |
| S15.760 | rough(1) | ${ }^{n}$ zà:ranzere (in physical appearance) |
| S15.770 | smooth | ${ }^{\text {nd }}$ ḑàmpo |
| S15.790 | blunt | dùmpa |
| S15.810 | heavy | tinte |

114 Both pleasant and unpleasant smell.

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| S15.820 | $\operatorname{light}(1)$ | jàjmo |
| S15.830 | wet | lánte |
| S15.840 | dry | kámpo |
| S15.850 | hot | tshánte |
| $\mathrm{S}_{15.851}$ | warm | tònmo, tònmo |
| S15.870 | clean | là̀ $p^{h}$, là̀:fo 'clean; beautiful; clear' |
| S15.880 | dirty | ${ }^{( }{ }^{n}$ ) áá $^{\text {n }}$ a |
| S15.890 | wrinkled | nérma |
| S16.110 | the soul or spirit | námfet |
| S16.150 | surprised or astonished | hà là̀efa |
| S16.180 | the good luck | tála zàjbo ${ }^{115}$ |
| S16.190 | the bad luck | tála yànba |
| S16.230 | happy | gèri; kítpu |
| S16.250 | to laugh | gòtfa |
| S16.260 | to play | tsédza |
| S16.270 | to love | tshéyun pètfa |
| S16.290 | to kiss | pók layḑa |
| S16.300 | to embrace | pày dàmdza |
| S16.310 | the pain | sùk |
| S16.320 | the grief | dùkpo |
| S16.330 | the anxiety | miksotma 'anxiety; irritation' |
| S16.340 | to regret or be sorry | $\left({ }^{n}\right)$ gøtpa pètfa, ${ }^{( }{ }^{\prime}$ gjòtpa pètfa |
| S16.350 | the pity | níndzja |
| S16.370 | to cry | jùḑa ( $\mathrm{NVOL}, \mathrm{NH}$ ) |
| S16.380 | the tear | thímak |
| S16.410 | to hate | migàdsa |
| S16.420 | the anger | ts ${ }^{\text {i }}$ kpa |
| S16.440 | the envy or jealousy | tàzak |
| S16.450 | the shame | jòza |
| S16.480 | proud | gèri |
| S16.510 | to dare | hámba pètfa |
| S16.520 | brave | mindsikhan |
| S16.530 | the fear | (té) zìe |

[^65](cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| S16.540 | the danger | (té) zìe |
| S16.620 | to want | gòefa |
| S16.622 | to choose | pédja |
| S16.630 | to hope | rèva pètfa |
| S16.650 | faithful | gòk ${ }^{\text {i }}{ }^{116}$ |
| S16.660 | true | $\operatorname{dima}(\eta)$ |
| S16.670 | to lie(2) | zỳn tfudza, zùn tfüdza |
| S16.680 | the deceit | dòkhja |
| S16.710 | good | ètpo (ANIM); fimbo 'good (eatables, tasty)'; zàybo (internal beauty, e.g. calmness); <br> dèmo (external qualities); kátfa; àt ${ }^{h} a$ |
| S16.720 |  | jànba; mànlok; khámloktfa 'disgusting' |
| S16.730 | $\operatorname{right}(2)$ | $\operatorname{dimã}(\eta)$ 'right; true' |
| S16.740 | wrong | mànlok |
| S16.790 | the praise | mòn |
| S16.810 | beautiful | dèmo; là:po 'clean; beautiful; clear' |
| S16.820 |  | khámloktfa |
| S16.830 | greedy | ${ }^{\text {ndòtpa }}$ |
| S16.840 | clever | táybo |
| S17.110 | the mind | sém, sémba |
| S17.130 | to think(1) | nòksam táyḑa |
| S17.150 | to believe | tátpa pètfa |
| S17.160 | to understand | hã kòdJa |
| S17.170 | to know | séjsa (NH), khéndza (H) 'know'; tfá òtfa 'to know about' |
| S17.171 | to guess | tshót pètfa |
| S 17.172 | to imitate | pé (j)tadza |
| S17.180 | to seem | tórezik òtfa 'to seem; to look similar in kind' |
| S17.190 | the idea | nòksam |
| S17.210 | wise | fék ${ }^{\text {an, }}$, ékan |
| S17.230 | mad | núnpa |
| S17.240 | to learn | láptfa 'to learn; to study; to teach; to gossip' |
| S17.242 | to study | láptfa 'to learn; to study; to teach; to gossip' |

[^66](cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| S17.250 | to teach | láptfa 'to learn; to study; to teach; to gossip' |
| S17.260 | the pupil | léptuk |
| S17.270 | the teacher | bàvu (M); bàmo (F) |
| S17.280 | the school | sikul |
| S17.310 | to remember | àtla portfa ${ }^{117}$ 'to keep in memory (vol)' |
| S17.320 | to forget | sèttfa |
| S17.340 | clear | lã̀: $p^{h}$ o, lã̀:fo 'clean; beautiful; clear' |
| S17.350 | obscure | hà̀ mikòna |
| S17.360 | secret | $p^{\text {hák }}$ |
| S17.370 | certain | táktak; tántan |
| S17.380 | to explain | fáttfa |
| S17.430 | the doubt | sémpa yànpa |
| S17.441 | to betray | dòkhja távoḑa |
| S17.460 | easy | làe lámo |
| S17.470 | difficult | kà:po |
| S17.480 | to try | Serrui |
| S17.490 | the manner | bètlu |
| S17.520 | because | tíla séna 'because; that's why' |
| S17.530 | if | kàlte |
| S17.540 | or | jàna |
| S17.550 |  | vòi, òi |
| S17.610 | how? | tsúk |
| S17.620 | how many? | tsám ${ }^{118}$ 'how many?; how much?' |
| S17.630 | how much? | tsám ${ }^{119}$ 'how many?; how much?' |
| S17.640 | what? | $t i$ |
| S17.650 | when? | nàm |
| S17.660 | where? | kàna (non-specific location); kàndu (specific location) |
| S17.670 | which? | kàyte, kàn |
| S17.680 | who? | sú |
| S17.690 | why? | tila; òti ty ${ }^{\text {hésu }}$ |
| S18.110 | the voice | kát |

[^67](CONT.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| S18.120 | to sing | (lú) tápdza |
| S18.130 | to shout | $k^{h}$ ágjèptfa |
| S18.150 | to whisper | $p^{\text {hákla ùrtaydza }}$ |
| S18.160 | to mumble | màlakmuluk sètfa |
| S18.180 | to shriek | kúzõ( $\eta$ ) kánḑ̧a [noise( N ) fill.InF] |
| S18.190 | to howl | kát tóndz̧a |
| S18.210 | to speak or talk | (v)ùr táydza |
| S18.211 | to stutter or stammer | áptfa |
| S18.220 | to say | sèrtfa |
| S18.221 | to tell | sèrtfa |
| S18.222 | the speech |  |
| S18.230 | to be silent | $k^{\text {há dùidja dètja }}$ |
| S18.240 | the language | kát |
| S18.260 | the word | $t^{\text {h }}$ ik |
| S18.280 | the name | min |
| S18.320 | to answer | lèn lóktfa |
| S18.340 | to deny | ${ }^{n} \mathrm{go}$ ( ${ }^{\prime}$ ) dildza |
| S18.350 | to ask(2) | tídsa |
| S18.370 | to refuse | $k^{h}$ á milèndsa |
| S18.380 | to forbid | mipètfa |
| S18.390 | to scold | $k^{h}$ á gjèptfa |
| S18.410 | to $\operatorname{call}(1)$ | ká gjèptfa |
| S18.430 | to announce | dá gjèpta |
| S18.440 | to threaten | jám tónḑa |
| S18.450 | to boast | péte pètfa |
| S18.510 | to write | tidja |
| S18.520 | to read | síldza |
| S18.56o | the paper | fú: |
| S18.570 | the pen | pén |
| S18.610 | the book | kíta:b, kítab |
| S18.710 | the flute | líu |
| S18.720 | the drum | dò:l |
| S18.730 | the horn or trumpet | gèliin ${ }^{120}$ (made of a human thigh bone); súĩna, st́ina (made of metal) |

[^68](cont.)

| Id | Gloss | Navakat |
| :--- | :--- | :--- |


| S19.150 the town | gjàlsa |
| :---: | :---: |
| S19.160 the village | jùl |
| S19.170 the boundary | ták |
| S19.230 the clan | $k^{h}$ ánda:n; $p^{\text {hílin }}$ |
| S19.240 the chieftain | gjètoo |
| S19.250 the walking stick | bikpa |
| S19.310 to rule or govern | ràzz pètfa |
| S19.320 the king | gjèlvo |
| S19.330 the queen | gjèlmo |
| S19.360 the noble, rich | $t^{\text {h }}$ ḱkpo |
| S19.370 the citizen | mi |
| S19.410 the master, owner | jindak |
| S19.420 the slave, servant | jókpo |
| S19.440 the freeman | àza:d |
| S 19.450 to command or order | òrder táydza |
| S19.46o to obey | $k^{\text {hála a }}$ àndza |
| S19.470 to permit | tèu tértfa, di (j) u tértfa |
| S19.510 the friend | jàdo, jào |
| S19.540 the neighbour | $k^{h}$ ímoze |
| S19.550 the stranger | jòmife |
| S19.56o the guest |  |
| S19.5650 to invite | ká gjèptfa |
| S19.580 to help | jào pètfa |
| S19.590 to prevent | mipètfa |
| S 19.610 the custom, tradition | lù: |
| S19.620 the quarrel | $t^{\text {húkpa }}$ |
| S19.650 to meet | $t^{\text {túktfa }}$ |
| S19.720 the prostitute | toóymo |
| S20.110 to fight | nólḑa |
| S20.130 the war or battle | dà thúkpa ${ }^{121}$ |
| S20.150 the army | máymi |
| S20.170 the soldier | mákmi |
| S20.210 the weapon | làk tálak |

[^69](cont.)

| Id | Gloss | Navakat |
| :---: | :---: | :---: |
| S20.220 | the club | kálab |
| S20.240 | the bow | $3^{\text {ù }}$ |
| S20.250 | the arrow | ${ }^{n}$ dà |
| S20.260 | the spear | bà:la |
| S20.270 | the sword | $t^{h_{i}^{\prime}}$ |
| S20.280 | the gun | tùmba:k |
| S20.350 | the fortress | $k^{h}$ ár |
| S20.440 | to defend | $t^{\text {hó }}$ pèdza, th'ó pèdza |
| S20.450 | to retreat | lòktfa 'to retreat, to return' |
| S20.471 | the guard | toókida:r |
| S20.520 | the fishhook | ká:nta: |
| S20.610 | to hunt | $k^{\text {níre: táydza }}$ |
| S20.620 | to shoot | túmbak gjèptfa |
| S20.630 | to miss | tà̀ ${ }_{\text {cja }}$ |
| S20.640 | the trap | dsà: ${ }^{\text {a }}$ |
| S21.110 | the law | ká:nu:n |
| S21.150 | the court | kórt |
| S21.170 | the judgment | $p^{h}$ ésla |
| S21.180 | the judge | dsàds |
| S21.230 | the witness | páybo |
| S21.240 | to swear | ná kjáldga |
| S21.250 | the oath | ná |
| S21.370 | the penalty or punishment | tátpa 'penalty; punishment; fine' |
| S21.380 | the fine | tátpa 'penalty; punishment; fine' |
| S21.390 | the prison | dzè: ${ }^{\text {a }}$ |
| S21.470 | the perjury | zùpgi páybo [lie.poss witness] |
| S21.510 | to steal | (kúnma) kúdza |
| S21.520 | the thief | kúnma |
| S22.110 | the religion | $t^{\text {hóe }}$ |
| S22.120 | the god | làma kónḑok 'god; lama; saint' |
| S22.130 | the temple | gùnba ${ }^{122}$ |
| S22.150 | the sacrifice | púzatf |
| S22.160 | to worship | sólva táydza |

[^70](cont.)

| Id Gloss | Navakat |
| :---: | :---: |
| S22.170 to pray | mónlam gjèptfa |
| S22.180 the priest | kóner ( $\mathrm{m}, \mathrm{F}$ ) |
| S22.190 holy | tsáyma 'holy; neat; clean' |
| S22.220 to preach | thóe pètfa |
| S22.230 to bless | timle: térffa |
| S22.240 to curse | làjo òjdza |
| S22.260 to fast | nène túydja |
| S22.310 the heaven | jàr thóri |
| S22.320 the hell | mànansõ( $\eta$ ) |
| S22.370 the idol, statue | kúnda |
| S22.420 the magic | dsà̀ ${ }^{\text {du }}$ |
| S22.430 the sorcerer or witch | lànde ${ }^{123}$ |
| S22.440 the fairy or elf | $k^{h}$ andoma ${ }^{124}$ (female) |
| S22.450 the ghost | lànde 'demon; ghost'; ' ${ }^{\text {de }}$ ' demon; ghost' |
| S22.470 the omen | témdel (positive) |
| S22.5100 the initiation ceremony | lèdui, lèdui |
| S23.1000 the radio | rèdio |
| S23.1100 the television | tívi |
| S23.1200 the telephone | télep ${ }^{\text {ºne, }}$, télefone |
| S23.1300 the bicycle | sấẽkil |
| S23.1350 the motorcycle | mòtarsaikil |
| S23.1400 the car | ká:r |
| S23.1500 the bus | bàs |
| S23.1550 the train | reil; train |
| S23.1600 the airplane | námndel |
| S23.1700 the electricity | bidsili |
| S23.1750 the battery | sél |
| S23.180o to brake | brèk gjèptfa ${ }^{125}$ |
| S23.1850 the motor | mòtar |
| S23.1900 the machine | mijin |
| S23.2000 the hospital | mánk ${ }^{\text {hay }}$ |
| S23.2100 the nurse | nàrs |

[^71](cont.)

| Id Gloss | Navakat |
| :---: | :---: |
| S23.2200 the pill or tablet | dilvu |
| S23.2300 the injection | $k^{\text {háp }}$ |
| S23.2400 the spectacles/glasses | mikjel |
| S23.3000 the government | serka:r |
| S23.3100 the president | ràftarpati, ràftrapati |
| S23.3200 the minister | màntri |
| S23.3300 the police | púlis |
| S23.3600 the birth certificate | fú: ${ }^{126}$ |
| S23.380o the election | ilekfen |
| S23.3850 the address | pata: |
| S23.3950 the street | ${ }^{\text {ngjàk }}$ |
| S23.4000 the post/mail | jè:, jèj |
| S23.4100 the postage stamp | tiket |
| S23.4200 the letter | jè:; jèj ${ }^{127}$ |
| S23.4400 the bank (financial institution) | bẽã( $\eta$ ) |
| S23.5200 the toilet | $t^{\text {háksa }}$ |
| S23.5300 the mattress | gadda; dén 'mat (to sit on)' |
| S23.5400 the tin/can | tín |
| S23.5500 the screw | zèr |
| S23.5550 the screwdriver | péty ${ }^{\text {² }}$ as |
| S23.56oo the bottle | bodul |
| S23.5650 the candy/sweets | mitha:i |
| S23.5700 the plastic | òmifưi ${ }^{128}$ |
| S23.5750 the bomb | bàm |
| S23.5900 the cigarette | tómak |
| S23.6000 the newspaper | àgbair |
| S23.6100 the calendar | lòdo |
| S23.6200 the film/movie | silima |
| S23.6300 the music | lú |

[^72](cont.)

| Id Gloss | Navakat |
| :---: | :---: |
| S23.6400 the song | lú |
| S23.9000 the tea | tà |
| S23.9100 the coffee | kófi, kófi |
| S24.0100 to be, to exist | òtfa |
| S24.0200 to become | tshá: $\int a$ |
| S24.0700 this | i:; ${ }^{n} d i$ |
| S24.0800 that | $p^{h_{L}^{\prime}}$, òti |
| S24.0900 here | íru |
| S24.1000 there | $p^{h}$ Ĺr $r u$ |
| S24.1100 other | zènma |
| S24.1200 next | típma: |
| S24.1300 same | téja:; tíkpa 'same, identical' |

# A Linguistic Sketch of Kinnauri Pahari 

## 1 Introduction*

A few works (Cunningham 1844; B.R. Sharma 1976; Bajpai 1991; D.D. Sharma 1988; Saxena 2006b; Eberhard et al. 2021; Kumar and Bezily 2015) and Census of India report an Indo-Aryan (IA) community in Kinnaur, administratively officially classified as a "scheduled caste". ${ }^{1}$ In this chapter this indigenous IA community will be referred to as the IA community of Kinnaur and its language will be referred to as Kinnauri Pahari. According to the 1991 Census of India report, the total population of this community in the Kinnaur district was 19,153 ( 9,882 male and 9,271 female). In the 2011 census the size of this community had decreased to 14,750 individuals ( 7,433 males and 7,317 females). ${ }^{2}$ While this community is found in the whole of Kinnaur, in lower Kinnaur (including Sangla) it has its own language, distinct from the Sino-Tibetan (ST) language of this region (Kinnauri; see Chapter 2), whereas in the Upper Kinnaur region the

[^73]corresponding community speaks the local ST language, for example, Navakat (see Chapter 3) in the Nako village.

Of the works mentioned above, only Cunningham (1844), B.R. Sharma (1976), Saxena (2006b), Eberhard et al. (2020), and Kumar and Bezily (2015) even note the existence of the language of this community. D.D. Sharma states that this community speaks "a variety of Indo-Aryan" (1988: 5), but he does not provide any further details. Both Ethnologue (Eberhard et al. 2021) and Glottolog (Hammarström et al. 2020) include the language of this community in their classification (ISO 639 code kjo; referred to as "Kinnauri, Pahari" in Ethnologue and "Indo-Aryan Kinnauri" in Glottolog), as belonging to the Western Pahari subgroup of Indo-Aryan.

According to Cunningham (1844: 224), "[Kinnauri Pahari] differs as much from the Kunawaree, as that does from the Bhotee". He provides a word-list (92 items). B.R. Sharma (1976) provides a short text (6 lines) in two Kinnauri Pahari varieties from five different localities (Chaura-Kafor, Rajgramang, Ribba, Morang, and Ropa). Saxena (2006b) presents a set of linguistic features in Kinnauri and Kinnauri Pahari in order to discuss the socio-cultural and linguistic situation in Sangla. Kumar and Bezily (2015) present an analysis of the phonemic inventory of Kinnauri Pahari, but do not specify in which village or region in Kinnaur the variety is spoken on which their analysis is based. Similarly to the local ST varieties, IA spoken in Kinnaur exhibits variation, too. Consequently, the differences between the analysis presented below and earlier studies could be due to variety differences.

The Kinnauri Pahari data for the present study were collected during a series of fieldtrips to Kinnaur, beginning in 2002. The data represent the speech of the Chamang sub-community in Sangla tahsil (Brua and Sangla villages) and in Nichar tahsil (Chagaon village). ${ }^{3}$ An informal comparison of the data collected from these villages shows minor variation. If these differences reflect regional dialectal differences or not, is difficult to ascertain at this stage. It is important to note that because of the small size of the sub-groups of this community, it is commonplace that young Kinnauri Pahari men get married to women from outside Kinnaur (primarily from the lower Himachal Pradesh region), who speak a different language, but they belong to the same IA sub-

3 The IA community in Kinnauri is classified into sub-groups based on their traditional occupations. Ores 'carpenter community' as well as sui 'the name of the social group traditionally associated with tailoring' (sui 'tailor' in both Kinnauri Pahari and in Kinnauri) belong to the Chamang community. There are families belonging to the Ores and Sui communities in Sangla. In the ST Kinnauri language, the Chamang community is called Chamang and women of this sub-community are called chama:rig. Chanals are not found in Sangla. Chanals are found in lower areas of Kinnaur-south of Sangla.
community. After getting married, many of these married couples settle down in the husband's village in Kinnaur and the wives slowly adjust to their new surroundings (including learning a new language or languages). In the present work, the focus is on the speech of the Kinnauri Pahari community members who have been long-time residents of these villages. All my consultants were either born in Kinnaur or had lived in Kinnaur for more than twenty years at the time of data collection.

## 2 Phonology

### 2.1 Consonants

The Kinnauri Pahari consonant phoneme inventory is presented in Table 32 and a list of minimal pairs is given below. Retroflex consonants tend to a relatively forward articulation in Kinnauri Pahari. This phenomenon is also observed in some other IA languages (e.g. Kvāri and Bangani, cf. Jouanne 2014).

### 2.1.1 Consonant Realization and Allophony

As in ST Kinnuari, lexical items which in other IA languages such as Hindi contain a clearly separate phoneme $/ \mathrm{b}^{\mathbf{h}} /$, show free variation between $\left[\mathrm{b}^{\mathbf{h}}\right]$ and $[\mathrm{b}$ ] in Kinnauri Pahari. For example, [b(h)ai] 'brother', [b(h)a:g] 'fate', [b( ${ }^{h}$ )andza:] 'sister's son'. This variation is found in our material only in word-initial position. There are no instances of $\left[b^{h}\right]$ in non-initial position in our material, whereas [b] occurs in all positions. There are also many instances of non-varying wordinitial [b]. For this reason, $/ b^{\mathbf{h}} /$ is posited as a (marginal) phoneme of Kinnauri Pahari, as the most straightforward way of indicating the instances of variation. Unlike the $[\mathrm{b}] \sim\left[\mathrm{b}^{\mathbf{h}}\right]$ variation, we do not find similar variation between [d] and [d $\mathrm{d}^{\mathrm{h}}$, or between [g] and [ $\mathrm{g}^{\mathrm{h}}$ ]. Here we find only [d] and [g] in all positions, even where other IA languages have the aspirated counterparts as phonemes. For example, [gori] 'mare', [gju:] 'clarified butter', [ka:ygi] 'comb', [gã:d] 'smell'. One exception is [bud ${ }^{\mathrm{h}}$ ] 'Wednesday'. This as well as other occasional instances of voiced aspirated consonants in modern Kinnauri Pahari may reflect the growing influence of Hindi.

The voiceless aspirated stops $p^{h}$ and $k^{h}$ are also realized as voiceless fricatives ([f] and [x]) in Kinnauri Pahari. According to Kumar and Bezily (2015), this happens only in non-initial positions. But in the speech of some language consultants, $\left[\mathrm{p}^{\mathrm{h}}\right]$ is in free variation with [ f$]$ in all positions. For example, $p^{h}$ ajul [ $\mathrm{p}^{\mathrm{h}}$ ajul] $\sim$ [fajul] 'valley'; $p^{h} O\left[\mathrm{p}^{\mathrm{h}}\right.$ oh] $\sim$ [foh] 'deer'; $p^{h}$ irns [ $\mathrm{p}^{\mathrm{h}}$ irns] $\sim$ [firns] 'to have, to become'; sa:ph ${ }^{h}$ sa:ph] ~ [sa:p] ~ [sa:f] 'clean'. As can be seen from the last example, $\left[\mathrm{p}^{\mathrm{h}}\right]$ also alternates with unaspirated $[\mathrm{p}]$ in word-final position.
table 32 Consonant phonemes in Kinnauri Pahari

Bilabial Labiodental Dental Alveolar Palatoalveolar Retroflex Palatal Velar Glottal

| Plosive | pb |  | t d |  |  | td |  | kg |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aspirated | $\mathrm{p}^{\mathrm{h}}\left(\mathrm{b}^{\mathbf{h}}\right)$ |  | $\mathrm{t}^{\text {h }}$ |  |  | $\mathrm{t}^{\text {h }}$ |  | $k^{\text {h }}$ |  |
| Fricative |  |  |  | s | $\int$ |  |  |  | h |
| Affricate |  |  |  | ts ts ${ }^{\text {h }}$ | t $\mathrm{f}^{\text {h }}$ |  |  |  |  |
|  |  |  |  | dz | d3 |  |  |  |  |
| Nasal | m |  |  | n |  |  |  | $\eta$ |  |
| Lateral |  |  |  | 1 |  |  |  |  |  |
| Trill |  |  |  | r |  |  |  |  |  |
| Approximant |  | $v$ |  |  |  |  |  |  |  |


| Minimal (or near-minimal) pairs: Consonants |  |  |  |
| :---: | :---: | :---: | :---: |
| $\mathrm{p}: \mathrm{b}$ p厅 | 'mat' | boif | 'liver' |
| $\mathrm{p}: \mathrm{b}$ pair | 'wound, sore' | baira(:) | 'twelve' |
| $\mathrm{p}: \mathrm{p}^{\mathrm{h}}$ sa:p | 'snake’ | sa:p ${ }^{\text {h }}$ | 'clean' |
| $\mathrm{p}: \mathrm{d}$ fapat | 'oath' | fadot | 'witness' |
| $\mathrm{t}: \mathrm{d}$ dã:t | 'tooth' | gã:d | 'smell' |
| $\mathrm{t}: \mathrm{d}$ trar [tzjar] | 'ready' | dear [dejar] | 'always' |
| $\mathrm{t}: \mathrm{t}^{\mathrm{h}}$ bait | 'path' | hait ${ }^{\text {h }}$ | 'hand' |
| $\mathrm{t}=\mathrm{d} \quad t i: \int$ | 'thirst' | di: $\int$ | 'whit' |
| $\mathrm{d}: \mathrm{d} d i$ | 'daughter' | de: | 'body' |
| d: d de:n | 'adult woman' | de:n | 'divorce’ |
| k:g kas | 'crow' | gas | 'cow' |
| $\mathrm{k}: \mathrm{k}^{\mathrm{h}}$ ka:no | 'one-eyed/blind' | $k^{h} a: n \mathrm{~s}$ | 'to eat' |
| t : $\mathrm{t}^{\mathrm{h}}$ gato [gatoh] | 'narrow' | kath | 'hard' |
| $\mathrm{d}: \mathrm{s} \quad d \varepsilon o$ | 'god' | seo | 'apple' |
| $\mathrm{s}: \int$ sisr | 'vein, artery' | firg | 'horn' |
| ts: $\int$ natsno | 'to dance' | nafno | 'to go' |
| $\mathrm{s}: \mathrm{ts}^{\mathrm{h}}$ so | 'hundred' | ts ${ }^{\text {b }}$ | 'six' |
| ts: ts ${ }^{\text {h }}$ tsair | 'four' | ts ${ }^{\text {a }}$ ar | 'ash' |
| ts: ts ${ }^{\text {h }}$ tsailno | 'to strain, to seive' | tsha:lu | 'blister' |
| ts: tf tsumns | 'to crouch' | tuma:ns | 'to squeeze' |
| f: $f$ f fain | 'ice' | tain [train] | 'ornament' |
| f: f f fe:lo [fe:loh], [fe:lo] | 'cold' | te:r | 'west' |
| dz: dS dzor [zor] | 'forceful' | dzor | 'pile, heap' |
| t : r suit | 'cotton' | su:r | 'fermented drink' |
| $\mathrm{b}: \mathrm{m} \quad b o$ | 'grease, fat' | mo [moh] | 'honey' |
| $\mathrm{d}: \mathrm{n} \quad d J f$ | 'ten' | nof | 'fingernail' |


| $\mathrm{g}: \mathrm{y}$ faig | 'vegetable' | fa:yli [farygli] 'chain' |
| :---: | :---: | :---: |
| $\mathrm{m}: \mathrm{n}$ kaim | 'work' | ka:n 'ear' |
| $\mathrm{n}: \mathrm{y}$ fain | 'ice' | fa:yli [farygli] 'chain' |
| l:r tailo | 'key' | tairs 'star' |
| j:v:h jar | 'or' | vai 'nest' |
|  |  | hair 'defeat' |

d has two allophones: [d] and [r]. According to Kumar and Bezily (2015: 7), "[d] occurs word-initially, after homorganic nasal and in gemination [...] [r] occurs elsewhere". As the following examples show, in our material, [d] also occurs after [1].

| soldo | [soldo] | 'straight' | kanaldi | [kanaldi] | 'granddaughter |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ts ${ }^{\text {cheldu }}$ | [tsheldu] | 'son' | randolo | [randolo] | 'widower' |
| $t t^{\text {hel }}$ di $i$ | [ts ${ }^{\text {heldid }}$ ] | 'daughter' | $k^{h} u n d i$ | [ $\mathrm{k}^{\mathrm{h}}$ undi] | 'leg' |
| kanaldu | [kanaldu] | 'grandson' | $t^{\text {a }}$ andi | [thandi], [thãdi] | 'cold (illness)' |
| pã:d | [pã:d] | 'floor' | dandoriy | [dandoriy] | 'dust' |
| fô:d | [ [Jõ:d] | 'beak' | duddu, dudu | [dudiu], | 'owl' |
|  |  |  |  | ['du,du] |  |

Except for kodvo [kəvus] 'bitter', podno [ponno] 'to study', grolduy [grolruy] 'wooden yoke on ox', lomdi: [lomqii] 'fox', [r] in our material occurs only intervocalically.

| udar | [urar] | 'cave' | hat ${ }^{\text {h}}$ da: | [hat ${ }^{\text {h }}$, ${ }^{\text {as }}$ ] | 'hammer' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| bodo | [bop] | 'big, older (m)' | baidi | [ba:ri] | 'carpenter' |
| budi | [burih] | 'old (F)' | udija:ns | [urija:mo] | 'to fly' |
| djodis | [dzori:] | 'pair' | relgaidi | [relga: ${ }^{\text {i }}$ ] | 'train' |
| redu(:) | [reru()], | 'radio' | divargadi(:) | [divargari(:)] | 'clock' |
|  | [redu(:)] |  |  |  |  |

[ Z$]$ and [z] are in free variation in Kinnauri Pahari. As can be seen below, both [z] and [ m$]$ occur word-initially, word-medially and word-finally. The same language consultant uses $[z]$ in one recording and $[\mathrm{z}]$ in another in the same word. As [ z ] occurs more frequently, we treat $d z$ as the phoneme.

| dzanti | [zanti] | 'stone' | hi:dz | $[\mathrm{hiiz}]$ | 'yesterday' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| dzongai | $[\mathrm{zongai}]$ | 'son-in-law' | b $^{\text {handza: }}$ | $\left[\mathrm{b}^{\text {hanza: }}\right]$ | 'nephew' |
| a:dz | $[\mathrm{azz}]$ | 'today' | pundzar | [punzar] | 'tail' |
| bi:dz | $[\mathrm{bizz}]$ | 'female' | bsdzno | $[\mathrm{bszno}]$ | 'to send' |

While $h$ in word-initial position is always audible (e.g. [harr] 'necklace', [hãũ] [1SG.NOM], [harko] 'bone'), in medial position it is often not audible. For example, [me(h) $\mathfrak{y g a}(\mathrm{i})]$ 'expensive', [me(h)ma:n] 'guest', [ [fr] 'town', [medi] 'henna'.
$t y$ in Kinnauri Pahari, too, shows some variation. In some lexical items it is also realized as [tr] (e.g., tfa:n [tfa:n] ~ [tra:n] 'ornament'; pa:tf [pa:t]] ~ [pa:tr] 'leaf') or as [t] tJoprin [toprin] ~ [tJoprin] 'scold'. ${ }^{4}$ In word-final position a variation [tf] ~ [ts] is found in examples such as buktf [buktf] ~ [bukts] 'bunch'. ${ }^{5}$ As these variations occur only in a restricted set of lexical items, they may be results of different diachronic changes.

According to Kumar and Bezily (2015:15-16), $\int$ has two allophones, with [ s ] occurring before a retroflex plosive and [J] elsewhere. This does not seem to be the case in my material.

Unlike Kinnauri and Kanashi, we have not noticed any variation in the phonetic realization of word-final voiced stops e.g. garib [gari:b] 'poor'. In Kinnauri Pahari they are articulated clearly as voiced stops.

### 2.1.2 Geminated Consonants

The following are some examples of geminates.

| samuddar | [samudiar] | 'sea, ocean' | mumbatti | [mumbati] | andle' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| gott | [got:] | 'mill' | himmot | [him: ${ }^{\text {at] }}$ | 'courage' |
| fukkur | [ ukiur] | 'Friday' | $t^{\text {h }}$ umma: | [ ${ }^{\text {h }}$ um:a:] | 'walking stick' |

As shown in Figures 6-7, there is a clear difference in the duration of geminates and singletons.

### 2.2 Vowels

2.2.1 Oral Vowel Phonemes

The oral vowel phonemes of Kinnauri Pahari are listed in Table 33. In addition, Kinnauri Pahari has nasal vowel phonemes (see Section 2.2.2).

Figure 8 shows a formant plot of these phonemes (except $o$, for which we had insufficient data).

Kumar and Bezily (2015) make a phonemic distinction between lax and tense vowels, but not vowel length. In our analysis length is phonemic in Kinnauri Pahari. The spectrograms in Figures 9-12 show a clear difference in quantity between short and long vowels.

[^74]
figure 7 Duration of geminate and non-geminate /t/: kitteg 'how many' (left) and bite 'inside' (right)

For $i, a, u$, length and quality are tied together. When short, $a$ is more central and schwa-like. In some cases it is realized as [ə], but when long, it is clearly [a:]. Similarly short $i$ is more like [ r$]$, but it is clearly [ i ] when long. The same is the case with $u$, where the short version is the somewhat more open and central [ $\quad$ ], but [u:] when long.
$e:$ and $\varepsilon_{i}$ are separate phonemes, as are $o:$ and $o r$. Note the near-minimal pairs [de:n] 'female' : [tshe:n] 'peace', [de:] 'body' : [te:] 'if', [do:f] 'ten' : [bo:f] 'lung', and [dzo:] 'yak' : [dzor] 'grain'. In these lexical items, the vowel quality is clearly different but there is no clear difference in length. This is so both in auditory impression and in measurements.

figure 8 Formant plot of Kinnauri Pahari vowel phonemes

figure 9 kam 'less'


FIGURE 10 ka:m 'work'

figure 11 bil 'the end'


FIGURE 12 bi:f 'twenty'

All vowel phonemes occur as both long and short, with one exception: There is no clear evidence for short $e$ and $\varepsilon$ as two distinct phonemes. It seems that these two have merged into a single phoneme, which is phonetically most like [ $\varepsilon$ ].

Minimal (or near-minimal) pairs: vowels

| $\mathrm{i}: \varepsilon$ | $t s^{h}$ ikno | 'to sneeze' | ts ${ }^{\text {coknno }}$ | 'to finish' |
| :---: | :---: | :---: | :---: | :---: |
| a: 0 | tamori | 'we (INCl)' | tomori | 'you (PL)' |
| : | fol | 'roof' | bafal | 'summer' |
| 0:0 | dzor | 'much' | dzot | 'moon' |
| 0:0 | $n o f$ | 'fingernail' | nor | 'animal' |
| u:o | pufã: | 'husband' | pofo | 'male' |
| i:u | $t^{h}$ cldi | 'daughter' | ts ${ }^{\text {k }}$ ldu | 'son' |
| :u | bai | 'arm' | bau | 'p.uncle' |
| i: 0 | randoli | 'widow' | randolo | 'widower' |

Minimal (or near-minimal) pairs: vowel length

| i : ix | rin | 'a kind of thread' | rim | 'loan, debt' |
| :---: | :---: | :---: | :---: | :---: |
| i $:$ i | $p^{h}$ ir | 'become' | sisr | 'vein' |
| i : i | bid | 'shoulder' | bi:t | 'wall' |
| a:a: | kam | 'less' | kaim | 'work' |
| a:a: | dsag | 'keep' | dzait | 'caste, race' |
| u:us | kul | 'descendant' | ku:l | 'ditch' |
| $\varepsilon: \varepsilon$ | henti | 'jaw' | tes:n | 'peace' |
| $\varepsilon: \varepsilon$ | brents | 'grasshopper' | be:nt | 'cane' |
| : 0 | sorgo | 'sky' | sosr | 'small man-made pond' |
| 0:0: | $p \supset$ | 'mat' | boif | 'lung' |
| ع: ${ }^{\text {a }}$ | tع: | 'because' | ta: | 'if' |
| u: x | su:r | 'wine' | sosr | 'small man-made pond' |

With regard to the vowels $i, a$ and $u$ there is a clear difference between long and short vowels. The difference in quantity is much more obvious than the difference in their quality. But when it comes to $\varepsilon$ and $e$ the difference between long and short is not that clear.

Vowels tends to sound longer in final open syllables. The (perceived) length in some cases may also be a result of extra stress on that vowel. However, there is also a clear difference in some items between long and short final vowels, as illustrated in Figure 13.

What we hear as long vowel, may in fact, in some cases, be stress. But in some cases it is very clear that there is a long vowel. It is not always clear if the vowel is long or short in word-final position, and there seems to be some variation both among speakers and even in the speech of the same individual. This appears to be especially common with word-final $a$, where it is often hard to know whether to transcribe with -a: or $-a$. However, some word-final vowels are clearly short, for example, in $l i k^{h} \varepsilon$ 'nit'.


FIGURE 13 Long and short final /o/: $d z v:$ 'grain' (left) and $d z o$ 'this' (right)

### 2.2.2 Nasal Vowels

Vowels preceding a nasal consonant are regularly nasalized in Kinnauri Pahari. There are also some instances where there are two possible phonetic realizations of a word-one where the nasalized vowel has a nasal consonant following the vowel, and one without a following nasal consonant. In some cases a compensatory vowel lengthening is also observed, when the following nasal consonant is not there explicitly.

| handno | [hãndno], [hãdno] | 'to walk' |
| :---: | :---: | :---: |
| gands | [gãnḑ], [gãḑ] | 'knot' |
| kundo | [kũndo], [kũd¢ $]$ | 'stove' |
| bandar | [bãndar], [bãdar] | 'monkey' |
| kuay | [kũãy], [kũã] | 'well ( N )' |
| $k^{\text {hodajay }}$ | [ $\mathrm{k}^{\mathrm{h}}$ (dãa)], [k${ }^{\text {hodana }}$ ] | 'left (direction)' |

In addition to the phonetic realization of nasalized vowels, nasalization is also phonemic in Kinnauri Pahari.

| pu: | 'feather' | $d \tilde{u}^{\text {a }}$ | 'smoke ( N )' |
| :---: | :---: | :---: | :---: |
| bait | 'path' | dã:t | 'tooth' |
| $d \varepsilon o$ [d $\varepsilon \mathrm{o}$ ], [djo] | 'god' | $d \varepsilon o ̃$ | [give.IMP] |
|  |  | $b \varepsilon t$ [bẽ:t] | 'walking stick' |
| fill | 'grinding stone' | firg | 'horn' |
|  |  | hiũ | 'snow' |
| kam | 'less' | kãq〕 | '(grassy) mountain' |
| ka:m | 'work' | kã:do | 'fishhook, thorn' |
| $k^{h} a u$ | 'meal' | hãu | 'I' [1SG.NOM] |


| fifa $:$ : $)[\mathrm{j} \mathrm{j} \mathrm{ah}]$ | 'glass' | pufã: | 'husband' |
| :--- | :--- | :--- | :--- |
| fok | 'doubt' | fok | 'interest' |

In this chapter nasalization is marked only in those instances where there is no nasal consonant following a nasalized vowel.

### 2.2.3 Vowel Variation

When a word ends with a vowel, [ h ] is heard at times after the final vowel. As can be seen in the examples provided below, [ h ] can occur after both front and back vowels, rounded as well as unrounded. This is more often the case when the vowel is short.

| si | [si(h)] | 'with' | mo | [mo(h)] | 'honey' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $l \varepsilon t i$ | [leti(h)] | 'glue' | halko | [halko(h)] | 'light (2)' |
| gori | [gəri(h)] | 'coconut' | fuklo | [ juklo (h)] | 'white' |
| dari | [dari(h)] | 'beard' | koyglo | [koŋglo(h)] | 'soft' |
| tsandi | [tsandi(h)] | 'silver' | tikh | [ $\mathrm{ik}^{\mathrm{h}} \mathrm{J}(\mathrm{h})$ ] | 'sharp, pointed' |
| $k \varepsilon$ | [ke(h)] | 'at' | gorks | [gırks(h)] | 'heavy' |
| tfa | [tfa(h)] | 'tea' | juko | [Juko(h)] | 'dry' |
| fifa | [ $\mathrm{j} \mathrm{j} \mathrm{ja}(\mathrm{h})$ ] | 'glass' | taito | [ta:to(h)] | 'warm' |
| $p i t^{h} u$ | [pit ${ }^{\text {h }} \mathbf{u}(\mathrm{h})$ ] | 'after' | felo | [ $\int \operatorname{clo}(\mathrm{h})$ ] | 'cold' |
| dzu: | [dzus(h)] | 'cloud' | farro | [ $\int \operatorname{arro}(\mathrm{h})$ ] | 'beautiful' |

Similarly, in words beginning with [ J$]$, a [ h ] is heard word-initially. For example, [(h) $\operatorname{snt}{ }^{h} \varepsilon$ ] 'there', [(h) $\mathrm{Pr} \varepsilon s$ ] 'a community name'.

There is also some variation found between [a] and [o] in words which in Hindi have an [a] (e.g., [maftar] : [maftor] 'teacher').
2.2.4 Diphthongs

The following diphthongs are found in our material.

| [ai] | ain | 'spline' | [ãĩ] | nã:ĩ | 'navel' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [ao] | nao | 'name' | [ãõ] | kยleãõ | 'fir' |
| [as] | tas | 'fever' |  |  |  |
| [au] | $k^{h} a u$ | 'food' | [ãũ] | hãũ | 'I'[1SG.NOM] |
| [عa] | tear | 'ready' | [ãı ${ }^{\text {] }}$ | pitshã: | 'behind' |
| [عi] | cisa | 'twenty' | [ $\check{\text { c̃] }}$ ] | $m \tilde{\varepsilon} \tilde{y} \tilde{\varepsilon}$ | [1SG.ERG] |
| [عo] | seo | 'apple' | [عũ] | $g \varepsilon \tilde{u}$ | 'wheat' |
| [iz] | ma:risn | 'quarrel' |  |  |  |
| [iu] | dius | 'sun' | [ĩũ] | hĩu | 'snow' |



In the orthography adopted for this chapter, we write all diphthongs as sequences of two vowel symbols. Especially the [i] and [u] components exhibit variation between a more vocalic realization and one closer to $[\mathrm{i}] /[\mathrm{u}]$ or $[\mathrm{j}] /[\mathrm{u}]$ : [dui] : [dui] : [duj], [duar] : [duaar] : [duar].

### 2.3 Words with Special Prosody

There is a restricted set of words whose prosodic structure is markedly different from Kinnauri Pahari's default stress pattern. In this set of words there is a clear secondary stress on the syllable following the stressed (first) syllable, and also a slight break between the syllables.

| $t \varepsilon t \varepsilon[' t \varepsilon ., t \varepsilon]^{6}$ | 'grandfather' |
| :---: | :---: |
| ['api(:).,te.tz], ['aus(:)., te.ts] | 'grandparents' |
| ['bis., ba:p] | 'stepfather' |
| ['du., du] | 'owl' |
| ['la:. Ja:no] | 'to look for' |
| ['bis., die] | 'stepdaughter' |
| ['bi., ajũ:] | 'stepmother' |

This can be seen clearly when we compare the spectrograms of tets 'grandfather' and $t^{h} a t \varepsilon$ 'joke' (see Figure 14).

As we can see in Figure 14, there is a marked syllable boundary in tetz 'grandfather', which is not found, e.g. in $t^{h} a t \varepsilon$ 'joke'. It is possible that ['te.t t ] 'grandfather' had originally a longer mid-word consonant, which is not audible synchronically, resulting in a marked prosodical stress structure. In Kinnauri Pahari di- and polysyllabic words the primary stress appears on the first syllable, and the stressed syllable is much more prominent than other syllables in the word, as in $t^{h} a t \varepsilon$ 'joke'. In tete 'grandfather', however, it seems that both syllables have approximately equal prominence.

[^75]

FIGURE 14 Two stress patterns in bisyllabic words: $t \varepsilon t \varepsilon$ 'grandfather' (left) and $t^{h} a t \varepsilon$ 'joke' (right)

## 3 Noun Phrase

### 3.1 Noun Phrase Structure

The noun phrase in Kinnauri Pahari has the following basic structure:

$$
\begin{aligned}
& \left(\text { DEM } / \mathrm{NP}_{\text {POSS }}\right)(\text { Num })((\operatorname{Adv}) \operatorname{Adj}(-\mathrm{M} /-\mathrm{F})) \\
& \mathrm{N}(-\mathrm{DIM})(-\mathrm{PL})(\text { DEF.HUM })(\text { PL })((-) \mathrm{CASE})
\end{aligned}
$$

(1) hoso honori dui bod-o fukl-ว dzanti-ro 3SG.DIST.NOM DEM.DIST.PL two big-M white-M stone-POSS.M gor-ro mailik house-POSS.m owner
'He is the owner of those two big white houses of stone.'

With pronouns, however, the non-numeral quantifier adjectives (e.g. scb 'all') follow the pronoun.
(2) hotenori $\operatorname{s\varepsilon b}(=\varepsilon)$ ores $p^{h}$ ir- $\varepsilon s$

3PL all(=EMP) carpenter become-AUX.PRS. 3
'They all will be carpenters.'

## 3.2 <br> Nouns

3.2.1 Noun Structure
3.2.1.1 Noun Stems

Unlike what we encounter in some other IA languages, Kinnauri Pahari does not exhibit a distinction in its noun declension between a nominative and oblique noun stem form. Further, on the whole all nouns-both masculine and feminine nouns and both native items and loanwords-inflect in the same way. They take the same set of plural markers and the case markers are the same in both numbers.

The nominal morphology of Kinnauri Pahari is close to the agglutinative ideal, but as in any language, there are some exceptions. Many nouns do not express the plural formally, there is some phonologically conditioned allomorphy and some lexically determined idiosyncrasies in the system of case endings, and the expression of the plural is partially conditioned by animacy.

Most IA-origin nouns and adjectives which take an adaptive marker in Kinnauri (see Chapter 2), occur in Kinnauri Pahari without the adaptive marker. The following are all the nouns and adjectives which end in the adaptive marker -ay, -iy, -es in the Kinnauri Pahari IDS/LWT list (see Appendix 4B). All are the same in ST Kinnauri, although grolquy 'yoke' also appears in the variant form golduy in Kinnauri.

| pailss | 'herdsman' | dzolay | 'twins' |
| :---: | :---: | :---: | :---: |
| tijares | 'duck' | fokray | 'orphan' |
| pres | 'name of a social group' | masay | 'flesh, meat' |
| $k^{h} u$ sies | 'happy' | Sitay | 'nasal mucus' |
| tsorin | 'trough' | dusray | 'chimney' |
| vaimay | 'wrong, fault' | jodzay | 'tool' |
| si:may | 'boundary' | $k^{h} o d z a y$ | 'left' |
| kuay | 'well (n)' | tsutkay | 'quiet' |
| $t^{\text {hoday }}$ | 'waterfall' | grolduy | 'yoke' |
| mesay | 'match ( N )' | mult ${ }^{\text {a }}$ a | 'roof' |

### 3.2.1.2 Nominal Compounds

In Kinnauri Pahari noun compounds are formed by a combination of two bare nouns (i.e., $[\mathrm{N} \mathrm{N}]$ ) or with a possessive marker affixed to the first noun (i.e., [ N -poss N$]$ ). The former kind comprises both copulative and endocentric compounds.
[ N N]
ajũu+boa [mother+father] 'parents'
$b\left({ }^{h}\right) a: i+b \jmath \varepsilon n \quad[$ brother+sister $] \quad$ 'sibling'

| a:vi+tcte | [grandmother+grandfather] | 'grandparents' |
| :--- | :--- | :--- |
| foro+fЭfaij | [father.in.law+mother.in.law] $]$ | 'parents-in-law' |
| divarr+gadi: | [wall+watch] | 'clock' |
| pi:th+harko | [back+bone] | 'spine' |

[ N -poss N ]
mats ${ }^{h}$ i-ro pã: $k^{h} \quad$ [fish-poss.m feather/wing] 'fin'
mats ${ }^{h}$ i-ro harks [fish-poss.m bone] 'scale'
mutkan-rodzũe [head-poss.m louse] 'head louse'
de:-ro dз $u$ e
mo-ro ma:k ${ }^{h}$
dura:-ro kirs
de:-ro ba:l
pifl-ro nof
nuni:-ro mutkan
pa:ni-ro dzaidz
[body-poss.m louse] 'body louse'
[honey-poss.m fly] 'bee'
[wood-poss.m insect] 'termite'
[body-Poss.m hair] 'body hair'
[cat-poss.m fingernail] 'claw'
[breast-poss.m head] 'nipple or teat'
[water-Poss.m ship] 'ship' (any kind of naval vehicle)
mulk-romanuf [country-poss.m man] 'citizen'
गfti-ro goli: [medicine-poss.m tablet] 'pill or tablet'
dzэnom-no sartifikat
drajuar-o lesens
[birth-poss.m certificate] 'birth certificate'
[driver-Poss.m license] 'driver's license'
bi:- 'step-' which occurs in some kinship relationships should perhaps be treated as a derivational prefix as it never occurs on its own, and it occurs only in a few words (cf. Kinnauri: Chapter 2, Section 3.2.1.2).

| bi:baip | (basp 'father') | 'stepfather' |
| :---: | :---: | :---: |
| bi:ajũ: | (ajũ: 'mother') | 'stepmother' |
| bitstseldu | (tsheldu 'boy') | 'stepson' |
| bi:di: | (di: 'girl/daughter') | 'stepdaughter' |

### 3.2.2 Number

Kinnauri Pahari makes a two-way number distinction: singular and plural. The singular is zero-marked. A restricted set of nouns take one of the following plural suffixes: $-\varepsilon,-\supset$ or $-a$. The distribution of the plural suffixes is not phonologically conditioned. In each such case, only one of the three plural suffixes is permitted.

| SG | PL | SG |  | PL |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| kukur | 'dog' | kukur-a: | be:ri | 'sheep' | berr- |
| manuf | 'person, man' | manuf-a: | bait | 'talk(N)' | ba:t- |
| ra:ka:s | 'demon' | ra:ks-a: | ga:ts | 'garment' | ga:tsh-0 |

A noun phrase with a numeral can also receive plural marking.

```
(dui)manuf-a: [(two)man/human.being-PL]
duikukur-a: [two dog-PL]
duibe:r-\varepsilon [two sheep-PL]
```

However, plural suffixes do not occur with all nouns; for example, the following nouns do not take plural suffixes:

| dzanti | 'stone' | tfammatf | 'spoon' |
| :---: | :---: | :---: | :---: |
| tarr | 'star' | zimada:r | 'farmer' |
| gor | 'house’ | bapu: | 'uncle' |
| pã: $k^{h}$ | 'feather, wing' | ts ${ }^{\text {cheldu }}$ | 'boy' |
| duka:n | 'shop' | ts ${ }^{\text {c }}$ ldi $i$ | 'girl' |
| solok ${ }^{\text {h }}$ | 'road' | daktar | 'physician' |
| da:ms | 'ox' | pufã: | 'man' |

In such instances, as we will see below, plurality may be indicated either by means of a separate plural marker (hori and/or pere) and/or by means of a quantifier adjective (e.g. ba:do 'many'). Most recent loanwords, ${ }^{7}$ too, do not take the plural suffixes. The loanwords polis 'police' and $p^{h} \partial d z i$ 'army man' are exceptions, taking two different plural suffixes ( $-a$ : and $-e$, respectively).

| $p^{\text {hilam }}$ hori | 'movies' | dividi hori | 'DVDs' |
| :---: | :---: | :---: | :---: |
| djizns hori | 'jeans' | havaii-dzaidz hori | 'airplanes' |
| mez hori | 'tables' | rel hori | 'trains' |
| kurasi hori | 'chairs' | polis hori, polis pere, polis-a: | 'police (PL)' |
| kamizz hori | 'shirts' | $p^{h}$ วdzi hori, $p^{h}$ วdzi pere, $p^{h}$ วdzi-E | 'army men' |

[^76]pere and hori both mark plurality. ${ }^{8}$ In addition, pere-which also appears as an independent lexical item 'family, clan', ${ }^{\text {e.g. } m \varepsilon \text {-rs }} \mathbf{p e r \varepsilon}$ [1SG-poss.m family/clan] 'my family, my clan'-indicates animacy. Thus, with animate nouns, both hori and pers can occur, while hori occurs only with inanimate nouns. ${ }^{10}$

| raikas | 'demon' | raks-a:, raika:s pere, ra:ka:s hori |
| :---: | :---: | :---: |
| manuf | 'man, person' | manuf-a:, manuf hori, manufpere |
| tammaty | 'spoon' | tammat-a, tammat hori |
| padzars | 'priest' | padza:ro hori, padza:ro pere |
| ts ${ }^{\text {celdu }}$ | 'boy' |  |
| $t t^{\text {he }}$ ldi | 'girl' |  |
| be:ri | 'sheep' | bexi hori, be:ri pere, be:re |
| tsork ${ }^{\text {i }}$ | 'bird' |  |
| daktar | 'physician' | daktar hori, daktar pere |
| daanti | 'stone' | dzanti hori |
| tairs | 'star' | tarro hori |
| pã: $k^{h}$ | 'feather' | pã: ${ }^{\text {h }}$ hori |
| duka:n | 'shop' | duka:n hori |
| solok ${ }^{\text {h }}$ | 'road' |  |
| pait ${ }^{\text {n }}$ | 'leaf' | pa:ty hori |
| gaits ${ }^{\text {h }}$ | 'garment' | ga:ts ${ }^{h}(-){ }^{\text {h }}$ hori |

The following examples illustrate pere and hori as plural markers.

8 In Nepali -haru functions as the plural marker (Acharya 1991). It usually occurs with animate nouns and pronouns. In Nepali when haru occurs with inanimate non-countable nouns (e.g. rice), it means 'and other such things'. Rajasthani, too, has a plural suffix hōr/hōro/hōnō. In Chattisgarhi har occurs with nouns to denote definiteness (Bailey 1920; Grierson 1928). According to Masica (1991: 229), this plural marker derives from Old IndoAryan sarva 'all'. Nepali exhibits similar function of haru (Acharya 1991).
9 We have not found any lexical usage of hori in Kinnauri Pahari.
10 In Bailey ( 1908,1920 ), a similar function is mentioned in the descriptions of Nepali and Baghati. In Nepali janās occurs with humans (e.g., yak-janās manis-ko [of one-person man] 'of a certain man') and wata/oṭa occurs with inanimate objects. However, unlike Kinnauri Pahari, janās and waṭa/oṭa precede the head noun. Grierson notes that in Sirmauri Giripari and in Kiunthali, $t u$ can be optionally added to a noun "without changing its meaning" (Grierson 1928: 478) and in Satlaj (Kotgarhi) "A very common termination for nouns and adjectives is ṭau (or trau) added without changing the meaning. Thus we have bāhrṭau, a load." (Grierson 1928: 652). As can be seen here, at least form-wise these languages do not show similarities with Kinnauri Pahari pere/hori.
(3) gor horill $d z o l-i$
house PL light-PFV
'The houses lit (burned).'
(4) bjopa:ri-je ba:do fuklo ba:kri hori/pere loj-i
businessman-ERG many white she-goat PL/PL.ANIM buy-PFV
'The businessman bought many white female goats.'
(5) a:mori zimidarr hori/pere si

1PLE farmer PL/PL.ANIM COP.PRS.1PL
'We are farmers.'

Further, noun phrases with hori/pere may also take quantifier adjectives (e.g. ba:do 'many').

| SG |  | PL |  |
| :---: | :---: | :---: | :---: |
| kukur | 'dog' | kukur hori | 'dogs' |
|  |  | kukur pere |  |
|  |  | ba:do kukur | 'many dogs' |
|  |  | ba:do kukur hori |  |
|  |  | ba:do kukur pere |  |
| da:ms | 'ox' | darmo hori | 'oxen' |
|  |  | da:mo pere |  |
|  |  | ba:do da:ms | 'many oxen' |
|  |  | baido da:mo hori |  |
|  |  | ba:do da:mo pere |  |

They may also occur when the NP contains a numeral.
(6) dui gor hori dzol-i
two house PL light-PFV
'Two houses lit (burned).'

[^77]hoten dui-ro dui tsteldu hori/pere $t^{h} \varepsilon o$ 3SG two-Poss.m two boy PL/PL.ANIM COP.PST.M 'Those two had two boys.'

Further, the grammaticalized function of manuf (see Section 3.2.5) may also occur in noun phrases where plurality is indicated by one of the plural markers and/or by means of a plural quantifier adjective.
(8) $s \varepsilon b(=\varepsilon)^{12}$ pufã: manuf maftor $p^{h i r-\varepsilon s}$ all(=EMP) man DEF.HUM teacher become-AUX.PRS. 3
'All the men will be teachers.'
(9) de:n ${ }^{13}$ тапиј hori/perє gor dzurja-єs woman DEF.HUM PL/PL.ANIM house make-AUX-PRS. 3 'The women will build a house.'

Normally, noun phrases with hori/pere do not carry the plural suffix. Its occurrence, however, is not prohibited. This means that some animate nouns can exhibit up to five different plural forms.

| SG | PL |
| :--- | :--- |
| tsor | 'thief' |
|  | tsor-a: <br> tsor hori <br> tsor pere <br> tsor-a: hori <br> tsor-a: pers |

According to the language consultants, there is no difference in meaning if there is one plural marker or more than one plural marker in an NP.

12 In other IA languages, such as in Jaunsari, the cognate clitic $=i$ functions as an emphasis marker, meaning 'even (with inclusion)' (Bailey 1920).
13 de:n 'woman' may refer to an adult woman or to a female in her teens, but not to prepubertal females or to infant girls.

### 3.2.3 Gender

Gender is a grammatical category in Kinnauri Pahari, which manifests itself through various agreement phenomena. Kinnauri Pahari has two genders: masculine and feminine. Nouns have inherent gender, adjectives and some verb complex elements exhibit gender (and number) agreement with a head noun. There are also some word formation devices deriving nouns where a gender distinction is indicated. For example, the suffix -a:ni is suffixed to the masculine noun form (which is also the default form in Kinnauri Pahari) which describes a man's profession, to denote the corresponding female professional. ${ }^{14}$

| zim(i)dair | 'farmer (M)' | zimdarni | 'farmer (F)' |
| :--- | :--- | :--- | :--- |
| doktar | 'physician (M)' | doktara:ni | 'physician (F)' |
| maftar | 'teacher (M)' | maftara:ni | 'teacher (F)'15 |

The gender distinction is also indicated in animate nouns, such as the following. Here feminine nouns end in $-i$, with some exceptions. In the latter cases the feminine nominal forms end in a $-e$ (e.g. tsor 'thief', tsor-e, "tsor- $i$ ' female thief'; see below).

| $t^{\text {hel }}$ ldu | 'boy, son' | $t^{h} \boldsymbol{\varepsilon} l d i$ | 'girl, daughter' |
| :---: | :---: | :---: | :---: |
| lasro | 'bridegroom' | lasi | 'bride' |
| kanalqu | 'grandson' | kanaldi | 'granddaughter' |
| kutu: | 'nephew' | kuti: | 'niece' |
| randols | 'widower' | randoli | 'widow' |
| gablu | 'ram' | gabli | 'lamb (F)' |
| suygarr | 'boar' | sungari | 'sow' |
| goro | 'stallion' | gorri | 'mare' |
| ba:kro | 'goat (m)' | ba:kri | 'goat (F)' |
| kukur | 'dog' | kukuri | 'bitch' |

Similarly, adjectives, too, are, to some extent, sensitive to the gender of the head noun. A subset of adjectives end in $-\supset$ with masculine nouns, and the corresponding feminine forms end in $-i$ (see Section 3.4 for details).

[^78](10) tu bud-o manuf so

2SG.NOM old-M man COP.PRS.2PL
'You are an old man.'
(11) $t u \quad b u d-i d e: n ~ s \varepsilon$

2SG.NOM old-F woman COP.PRS.2SG
'You are an old woman.'

Further, in a possessive construction the gender of the head noun determines the form of the possessive marker (-ro or -ri). The possessive marker -ri occurs with feminine and $-r o$ with masculine head nouns.

|  | [i.nаме(г) Poss.r girl] | 'Sita's daughter |
| :---: | :---: | :---: |
| boen | [i.name(m)-poss.F sister] | 'Vik |
| vikram-ri gori | [i.name(M)-poss.F mare] | 'Vikram's mare |
| -ri kukrauti | [i.name(M)-poss.F bitch] | 'Vikram's bitch |
| am-ro ts ${ }^{\text {cheldu}}$ | [i.name(m)-poss.m son] | 'Vikram's son' |
| -ro ts ${ }^{\text {c }}$ ldu | [i.name(F)-poss.m son] | 'Sita's |
| m-ro | [i.name(m)-poss.m cow] | 'Vikram's cow' |
| vikram-ro pifi: | [i.name(m)-Poss.m cat] | 'Vikram's ca |
| me-robalti | [1SG-POSS.M bucket] | My buck |

Similarly, the distribution of the relative clause suffixes -sjai ${ }^{16}$ and -ser is also sensitive to the gender of their referents: -se: occurs with feminine referents and -sja: with masculine referents (see Section 5.4 for details).
(12) nats-do-sja:
dance-HAB.M-REL.M
'(male) who dances'
(13) nats-di-se:
dance-hab.f-REL.F
'(female) who dances'

Finally, the distribution of the habitual aspect markers (-do/-ndo and -di/-ndi), and the distribution of the past tense markers ( $t^{h}$ bs. $\left.t^{h} i\right)$, too, are sensitive to the gender of the subject. -di/-ndi and $t^{h} i$ occur when the subject has feminine

16 Note that Kinnauri has a similar (deverbal agent-forming) suffix:-tsja:/-tse: (see Chapter 2).
gender; -do/-ndo and $t^{h}$ b occur with masculine subjects (see Sections 4.2.2 and 4.3.2.1 for details).
(14) ra:d ${ }^{h} a: \quad$ tsit ${ }^{h}$ i: bantfjas-ji pith ${ }^{h} u$ ha:s-di i.name(F) letter read-PFV after laugh- HAB.F 'Radha laughs after reading the letter.'
(15) ra:m $\quad k^{h} a u k^{h} a:-n d o$
i.name(м) food eat-нав.м
'Ram eats food.'

While the gender distinction described above holds for the most part, there are some instances, where the default form (i.e. the masculine form) was spontaneously provided in constructions where we should, in principle, get the feminine form (16). When asked, the language consultant provided the "correct" form.
(16) ama:-je ap-ro di: la los-inds
mother-ERG self-POSs.m girl DAT beat-PFV
'Mother beat her own daughter.'

In general, apart from the tendencies mentioned above, there are no salient formal indicators showing the gender of Kinnauri Pahari nouns. Nouns of both genders can end in various vowels (boba: 'father (M)'; ama: 'mother ( F )'; hat ${ }^{h} i$ : 'elephant (M)'; api: 'grandmother (F)' ba:kri 'goat (F)') or consonants (bovn 'sister ( F )'; nor 'animal (M)'; de:n 'woman ( F$)^{\prime}$; dek ${ }^{h}$ rats 'young man ( M$)^{\prime}$; nars 'nurse $\left.(\mathrm{F})^{\prime}\right)$. Together with the contact situation where the historically dominant language ST Kinnauri is one without systematic gender distinctions (see Chapter 2), this accounts at least in part for the peripheral role of gender in the grammar of Kinnauri Pahari, where this distinction is upheld mainly for animate nouns.

### 3.2.4 Case

The Kinnauri Pahari case markers are shown in Table 34. Following a long tradition in IA grammatical description, the case markers are analyzed as postpositions, except in those cases where morphophonology indicates that they should be classified as suffixes (cf. Masica 1991: 223f.). ${ }^{17}$

[^79]table 34 Case markers in Kinnauri Pahari

| Case | Case marker(s) |
| :--- | :--- |
| Nominative | $\emptyset$ |
| Ergative/instrumental | $-\varepsilon$ |
| Dative | $l a, n a$ |
| Possessive | $-r o /-r i$ |
| Locative | $-\varepsilon, k \varepsilon$ |
| Allative | $b i l \varepsilon$ |
| Ablative | $k a$ |

### 3.2.4.1 Nominative

The nominative form is the stem of a noun or pronoun without any other case suffixes. This form can be used for subjects (intransitive and transitive)-i.e., the NP triggering subject indexing in the verb-and direct objects.

### 3.2.4.2 Ergative/Instrumental

The suffix $-\varepsilon$ functions as the ergative marker. It is realized as $-j \varepsilon$ when the stem ends with a vowel, and optionally as -ve when the stem ends with a round vowel; $-\varepsilon$ occurs after consonants. ${ }^{18}$ The ergative marker occurs with all persons and numbers in all tenses and aspects. ${ }^{19}$
analysis of the case suffixes as NP clitics would require additional data (non-nominative marked NPs with extraposed constituents after the head noun).
18 In my data there are occasional examples of $-j \varepsilon$ appearing after some sonorant consonants (e.g., 204-205).

19 Unlike many other IA languages, Kinnauri Pahari does not seem to exhibit split ergativity, which could point to ST influence. However, since almost all my examples of ergativemarked subjects are accompanied by verbs in the perfective, this may indicate the presence of a tense-aspect based alignment preference. In Grierson (1928) there is only one Western Pahari language (Sirmauri Dharthi) which exhibits a consistent ergative marking system. Based on the language descriptions in Grierson (1928), we can distinguish three different alignment types among the Pahari languages (page references are to Grierson 1928 but language names have been normalized):
Split ergativity: Nepali (46-55), Kumaoni (108-157), Jaunsari (383-400), Gujari of Hazara (930-934).
Consistent ergativity: Sirmauri Dharthi (458-467).
Insufficient information or some other case-marking system: Sirmauri Giripari (477486), Baghati (495-505), Kului (670-679), Mandeali (721-728), Chambeali (769-784),
(17) mẽĩ-je get na-lja-ji

1SG-ERG song NEG-sing-PFV
'I did not sing (a) song.'
(18) $t^{h} o k r u ~ h \partial r i-j \varepsilon ~ p^{h} \jmath l k^{h} a-\varepsilon n$
boy Pl-ERG fruit eat-prog
'Boys (are) eating fruit(s).'
(19) a:mori-je seo gar-inde

1PLE-ERG apple take-PFV
'We took apples.'
(20) tenori-je tãu-la ki bol-o

3PL-ERG 2SG-DAT what tell-PFV.DIR
'What did they tell you?'

The ergative marker occurs only in transitive clauses. Its occurrence is, however, not obligatory.
(21) ra:m gor- $\varepsilon \quad n a f-i$
i.name(m) house-LOC go-PFV
'Ram went home.'
(22) hãũ/ mẽ兀-je tfunni ba:n-inds

1SG.NOM 1SG-ERG scarf tie-PFV
'I tied the scarf.'

The ergative marker is affixed to the last element of an NP (e.g., 18, 23). ${ }^{20}$
(23) hoss bude-budi-ro seb ka loudo tshelqu-je gor

DEM.DIST o.man-o.woman-POSS.M all ABL young boy-ERG house
loj-i
buy-PFV
'The youngest son of the old man and woman bought the house.'

Gaddi. (792-803), Pangwali (846-854), Bhadrawahi and Bhalesi (888-899). In Kiunthali (549-574) the ergative marker also occurs, at times, with intransitive verbs.
20 Examples such as the following are instances of apposition: tin-je manuf-je bra:g dek ${ }^{h}$-undo [3SG-ERG man-Erg lion see-HAB.м] 'He, the man, sees the lion.'

The case marker $-\varepsilon$ also functions as the instrumental marker (24-26) and as one of the two locative case markers (see below).
(24) Juri: tik ${ }^{h} \partial t^{h} u r i-j \varepsilon$ fa:g kait-en-s
i.name(F) sharp knife-INS vegetable cut-PROG-AUX.PRS. 3
'Shuri is cutting vegetables with a sharp knife.'
(25) sonam- $\varepsilon$ ap-ro hait ${ }^{h}-\varepsilon$ gor tua-ji
i.name(F)-ERG self-poss.m hand-ins house build-PFV
'Sonam built the house with her own hands.'
(26) ra:d ${ }^{h} a_{i-j \varepsilon} \quad$ pa:ni-je gaitsh-ว $\quad d o-j i$
i.name(F)-ERG water-INS garment-PL wash-PFV
'Radha washed clothes with water.'

### 3.2.4.3 Dative $^{21}$

The postposition la functions as the dative case marker. With the first person singular pronoun, $n a$ can also appear as an alternative to $l a .^{22}$
(27) boa(-je) ma la/na ra rupja: de-ndo
father(-ERG) 1SG.NNOM DAT 100 money give-HAB.M
'Father gives me hundred rupees.'
(28) ra:m- mohan la / *na gor bikin-i
i.name(M)-ERG i.name(M) DAT house sell-PFV
'Ram sold the house to Mohan.'
$l a$ also occurs with direct objects. Again, $n a$ can be used with the 1SG pronoun. The occurrence of the dative marker is, however, not obligatory. Semantic factors such as animacy and definiteness determine its occurrence.
(29) ra:m- $\varepsilon \quad$ kata:b $d \varepsilon-j i$
i.name(M)-ERG book give-PFV
'Ram gave the book.'

21 "Objective" would perhaps be a more apt name, but I follow a long tradition in the description of South Asian languages, where "dative" designates a case which can appear on both direct and indirect objects, and in the so-called "experiencer subject" construction.
22 Note that Nàvakat has a similar dative(/allative) marker—=la (see Chapter 3)—although a more relevant parallel may be the Nepali dative -la:i (see Appendix 4A to this chapter).
(30) hãu tãũ la fa-غn su

1SG.NOM 2SG.NNOM DAT look-PROG AUX.PRS.1SG
'I am looking at you.'
(31) ardzun-є kũã ke la:y tsharja-inde ap la marr-i i.name(M)-ERG well( N ) LOC jump( N ) leave-PFV SELF DAT kill-PFV 'Arjun jumped into the well and killed himself.'

The case marker $l a($ and $n a)$ also occurs in the following constructions.
(32) ra:m- mohan la $\varepsilon k(k)$ ganta: pokh-i
I.NAME(M)-ERG i.name(M) DAT one hour wait-PFV
'Ram waited for Mohan for an hour.'
(33) mẽ̃ $\mathrm{\varepsilon}-j \varepsilon \quad t^{h} \supset k u r$ pere la ga:tsh-o loj-i

1SG-ERG m.child PL.ANIM DAT garment-PL buy-PFV 'I bought clothes for the children.'

The dative marker la also occurs in complex constructions, where it follows the nominalized forms of the subordinate clause verb.
(34) hoss bazair naf-me la tea:r phir-i

DEM.DIST.NOM market go-NMLZ DAT ready become-PFV
'He got ready to go to the market.'
(35) Jiki-me la bolo kata:b
learn-nmlz dat good book
'The book which is worth learning (reading)'
(36) hãũ ra:m-ro kad fun-me la uzi-jد

1SG.NOM i.name(M)-POss.M voice hear-NMLZ DAT stand-PFV.DIR 'I got to hear Ram's voice.'

The dative case markers also occur in Kinnauri Pahari in the so-called experiencer subject construction (see Section 5.1).

### 3.2.4.4 Possessive

The case marker -ro/-ri functions as the possessive marker in Kinnauri Pahari with singular and plural nouns and pronouns. As mentioned above, it has two allomorphs: -ro and -ri. Generally speaking, -ri occurs on possessive modifiers
of feminine head nouns and $-r 0$ with masculine head nouns, though there are some instances in my material where -ro was also provided with feminine head nouns.
(37) $m \varepsilon-r i \quad t t^{h} \varepsilon l d i-j \varepsilon \int \jmath l \quad b u n-i n d \varepsilon$

1SG-POSS.F girl-ERG shawl weave-PFV
'My daughter wove a shawl.'
(38) $m \varepsilon-r \supset \quad t^{h} \varepsilon \varepsilon l d u-j \varepsilon \int \jmath l$ bun-inds

1SG-POSS.M boy-ERG shawl weave-PFV
'My son wove a shawl.'
(39) hathii-ro dã:t-ro kaitse
elephant-Poss.m tooth-poss.m necklace
'The elephant's-tooth necklace.'
(40) fimla-ro mosom bolo na-i
p.name-Poss.m weather good NEG.PFV
'Shimla's weather is not good.'
(41) mẽ̃ $\check{\varepsilon} \varepsilon$ hoi kata:b me-ro ajũ:boa-ro tẽ $\tilde{\varepsilon}=\varepsilon$

1SG-ERG DEM.PROX book 1SG-POSS.M parents-POSS.M for=EMP
loj-i
buy-PFV
'I bought this book for my parents.'

When the noun ends in $-r$, the possessive is realized as $-\supset /-i$ d drajuaro lesens 'driver's license' (drajuar 'driver'); gairs thais 'river bottom' (gair 'river').

In some restricted instances when the stem ends in a sonorant consonant (e.g. hoten [3SG.NNOM], dzonom 'birth', $b$ (i)jal 'evening'), the consonant of the possessive marker assimilates to the stem-final consonant. For example, hoten( $n$ ) $\mathbf{3}$ [3SG-Poss.m], bijal-lo $k^{h} a u$ [evening-poss.m food] 'dinner'. The regular possessive form -ro (e.g hoten-ro) is also found in the data in such contexts. In one case (dzonom-no sartifiket 'birth certificate’ [birth-poss.m certificate]), -no occurs as the possessive marker.

The possessive marker also occurs in a construction which describes that a person belongs to a particular region (42-43).

```
(42) ra:m kinnor-s (sa)
    i.name(m) p.name-poss.m (cop.PRS.3)
    'Ram is of Kinnaur.' (Ram is from Kinnaur.)
```

```
(43) a:mori kinnor-i
    (s\varepsilon)
    1PLE p.name-POSS.F (COP.PRS.1PL)
    'We (females) are of Kinnaur.' (We are from Kinnaur.)
```

Finally, the possessive marker -ro also occurs after a non-finite subordinate clause with the verb in the infinitive.
(44) mẽ̌-je hoten-no mor-nっ-ro ba:te fun-э 1SG-ERG 3SG-Poss.m die-INF-Poss.m talk(N).Pl hear-PFv.dir 'I heard the news of his dying'

### 3.2.4.5 Locative

All Western Pahari languages (as also many other IA languages) have the same case marker for ergative and locative. This is also the case in Kinnauri Pahari, where $-\varepsilon$ expresses both the locative and the ergative. The suffix $-\varepsilon$ is realized as $-j \varepsilon$ after a vowel, and may optionally be realized as $-v \varepsilon$ after a round vowel. However, unlike other Western Pahari languages, Kinnauri Pahari exhibits an additional locative marker $k \varepsilon$ (with the occasional variant $t f \varepsilon$ ).

Both $k \varepsilon$ and $-\varepsilon$ occur with stems ending in consonants and vowels. While a restricted set of nouns (e.g. badza:r 'market') allow both, only one of the two case markers is permitted in most cases (see examples below). At this stage it is not clear what determines their selection.
(45) ra:m bazair- $\varepsilon(/ \quad$ bazair $k \varepsilon) \quad n a f-i$
i.name(M) market-LOc (/ market LOC) go-PFV
'Ram went to the market.'
(46) hãũ $\quad g ə r-\varepsilon\left(/ \quad{ }^{*} g \supset r \quad k \varepsilon\right) \quad n a f-i$

1SG.NOM house-LOC (/ house LOC) go-PFV
'I went home.'
(47) ra:m dilli $k a$ fiml- $/{ }^{*}$ fimla ke rel $k \varepsilon /{ }^{*}$ rel- $\varepsilon$ ats ${ }^{h}-i$
i.name(m) p.name abl p.name-LOC train loc come-PFV
'Ram came from Delhi to Shimla on the train.' (by train)
(48) hãũ hoten tfe naf-me

1SG.NOM 3SG.NNOM LOC go-NMLZ
'I need to go there (= to it).'
(49) saygla kinnor $k \varepsilon=s$
p.name p.name LOC=COP.PRS. 3
'Sangla is in Kinnaur.'
(50) ta ke tini:=s
tea LOC sugar=COP.PRS. 3
'There is sugar in the tea.'
(51) vikram duka:n ke-s
i.name(m) shop LOC-COP.PRS. 3
'Vikram is in the shop.'

The locative marker $k \varepsilon$ also occurs in constructions where it indicates ownership; $-\varepsilon$ is not permitted here.
(52) $m u \quad k \varepsilon /{ }^{*}-j \varepsilon \varepsilon k(k)$ gor= $=\varepsilon s$ [goras]

ISG.NNOM LOC one house=COP.PRS. 3
'I have a house.'
(53) tãũ $\quad k \varepsilon\left(/^{*}-j \varepsilon\right) \quad \varepsilon k(k)$ gor $=\varepsilon s$ [gorəs]

2SG.NNOM LOC (/-LOC) one house=COP.PRS. 3
'You have a house.'
(54) ra:m $k \varepsilon\left(/^{*}-\varepsilon\right) \quad \varepsilon k(k)$ gor=ss [gorəs]
i.name(M) LOC (/-LOC) one house=cop.PRS. 3
'Ram has a house.'
(55) hotenori $k \varepsilon\left(/{ }^{*}-j \varepsilon\right) \quad \varepsilon k(k)$ gər na-i

3PL LOC (/-LOC) one house NEG-PFV
'They do not have a house.'

### 3.2.4.6 Allative

Like many other Western Pahari languages, Kinnauri Pahari, too, has a distinct allative case marker. It is bile.
(56) $s \varepsilon b=\varepsilon$ bos ka:lka: bile naf-do
all=EMP bus p.name all go-HAB.M
'All buses go towards Kalka.'

### 3.2.4.7 Ablative

$k a$ functions as the ablative marker.
(57) manuf dzun dilli ka $a-\jmath$
man REL p.name abl come-PFV.DIR
'The man who came from Delhi'
(58) $k^{h}$ iss $k a$ rupja: ga:r
pocket ABL money take.IMP
'Take the money from (your) pocket!'

The ablative marker occurs in the comparative construction.
(59) hãũ lija-no ka nats-no bodi ba-ndo su

1SG.NOM sing-INF ABL dance-INF many like-HAB.M AUX.PRS.ISG 'I (M) like dancing more than singing.'

Finally, the ablative marker can also follow a nominalized subordinate clause verb.
(6o) suntsi-ns ka aukha no-bol-no
think-INF ABL before NEG-say-INF
'Don't speak before thinking!'

### 3.2.4.8 A Comparison with Other Western Pahari Languages

A comparison of the Kinnauri Pahari case markers with some other Western Pahari languages (Jaunsari, Sirmauri, Baghati, Kiunthali, Kului, Mandeali, Chambeali; see Appendix 4A to this chapter) reveals that there are only two case markers which Kinnauri Pahari shares with other Western Pahari languages: (i) the possessive marker ( $-r 0 /-r i$, including its gender agreement) and (ii) the ergative case marker $(-\varepsilon)$. As in other IA languages, Kinnauri Pahari, too, has separate locative and allative case markers, but the case markers (forms) are different. Finally, la which functions as a dative marker in Kinnauri Pahari, is not listed for any Western Pahari language in Grierson (1928). This is possibly a borrowing from the coterritorial Kinnauri (see Chapter 2).

### 3.2.5 The Definiteness Indicator manuf

manuf in Kinnauri Pahari functions both as a lexical noun and as a grammatical word. As a lexical noun it refers to a person or to a male human being (61). As a grammatical word, it seems to indicate about a human referent that it is
known to the interlocutor, i.e., a kind of definiteness marking. It is similar in syntactic behavior and function to a noun classifier (Grinevald 2000: 64f.), but it contrasts only with its absence, i.e., there is no classifier system of which it is a part. It follows a human nominal argument in the singular (62-63). Its occurrence is optional. Plural and case markers follow it.
(61) gari:b manuf a:dz $d u k^{h}-i s$ poor man today grief-COP.PRS. 3
'The poor man is sick today.'
(62) mẽ̃̃-je tshokur (manuf) la $k^{h} \varepsilon l-\varepsilon n ~ d \varepsilon k^{h}-i$ 1SG-ERG boy DEF.HUM DAT play-PROG see-PFV 'I saw the boy playing.'
(63) de:n (manuf)- $\varepsilon$ hoten-tf $\varepsilon$ naf-me la mana: kor-i woman DEF.HUM-ERG 3SG-LOC go-NMLZ DAT refuse(N) do-PFV 'The woman refused to go there.'

This grammaticalized use of manuf is highly dispreferred with the lexical head noun manuf 'man' (64).
(64) *? dzvan manuf manuf- $\quad \quad k^{h}$ ou dzurja-ji young man DEF.HUM-ERG food make-PFV 'The young man prepared the food.'

### 3.3 Pronouns

3.3.1 Demonstrative Pronouns

The demonstrative pronouns in Kinnauri Pahari are hoi, hoso and ho(tz)nəri. hoi and hoss ${ }^{23}$ occur with singular head nouns. They can also occur with plural inanimate head nouns. $h \nu(t \varepsilon) n o r i$ occurs only with plural head nouns. hoi functions as the proximate demonstrative; hoso and hotenori function as the distant demonstratives. They occur with both masculine and feminine head nouns, in both nominative and non-nominative positions.
(65) hoss de:n manuf-e dura: nu-tsung-di DEM.DIST woman DEF.HUM-ERG wood NEG-pick-HAB.F 'That woman does not pick wood.'

23 This occurs in Jaunsari, too (Bailey 1920).
(66) hotensri de:ni pere-je nor la marr-i

DEM.DIST.PL woman.Pl PL.ANIM-ERG animal DAT kill-PFV
'Those women killed the animal.'
(67) hotenori pufã: pere gor- $\varepsilon \quad n a f-i$

DEM.DIST.PL man PL.ANIM house-LOC go-PFV
'Those men went home.'

The demonstrative pronouns also function as third person pronouns (see the next section).
(68) hoss baza:r naf-i thjo

3SG.DIST.NOM market go-PFV AUX.PST.M
'He went to the market.'
(69) hoi la fik-inde hoten la rui-no atsh-i

3SG.PROX DAT learn-PFV 3SG.NNOM DAT cry-INF come-PFV 'Having learnt this, s/he cried.'

### 3.3.2 Personal Pronouns

Kinnauri Pahari uses the same set of personal pronouns with both masculine and feminine referents, in all persons and numbers; see Table 35 . Kinnauri Pahari does not mark honorificity, neither on the pronouns nor in its verbal inflection. As we can see in Table 35, Kinnauri Pahari makes the exclusiveinclusive distinction in first person plural.

### 3.3.2.1 First Person

The distribution of the different first person singular pronoun allomorphs is as follows: hãu functions as the nominative; the bound forms mẽ̃ and $m \varepsilon$ occur with the ergative and the possessive marker, respectively; $m a$ occurs with the dative and locative markers.
(70) hãu dilli nafi

1SG.NOM p.name go-PFV
'I went to Delhi.'
(71) hãũ tfunni: ba:n-ide

1SG.NOM scarf tie-PFV
'I tied the scarf.'
table 35 The personal pronouns of Kinnauri Pahari

|  | Singular | Plural |
| :---: | :---: | :---: |
| 1 | hãũ (NOM) | a:mori (EXCL) |
|  | $m \tilde{\varepsilon} \check{\imath}-j \varepsilon$ (ERG) | ta:mori (INCL) |
|  | $\begin{aligned} & m \varepsilon-r o / m \varepsilon-r i \text { (POSS.M/POSS.F) } \\ & m a \text { (NNOM: DAT/LOC) } \end{aligned}$ |  |
| 2 | tu (NOM) | tomosri ${ }^{24}$ |
|  | $t \tilde{\varepsilon} \tilde{L}-j \varepsilon$ (ERG) |  |
|  | $t \varepsilon-r o / t \varepsilon-r i($ POSS.M/POSS.F) |  |
|  | tãã (NNOM: DAT/LOC) |  |
| 3 | (ho)so (NOM) | (ho)tensri, tinsri |
|  | hoi ( $\mathrm{NOM}, \mathrm{NNOM}$ ) | honori |
|  | (ho)ten, (ho)tin (nNOM) |  |

(72) mẽ̃ $-j \varepsilon \quad m \varepsilon-r i \quad$ boen la $p^{h} \supset l d \varepsilon n-\supset$

1SG-ERG 1SG-POSS.F sister DAT fruit give-PFV.DIR
'I gave (some) fruits to my sister.'
(73) $t^{h} \supset k u r$ pere ma na los-i
m.child PL.ANIM ISG.NNOM DAT beat-PFV
'Boys beat me.'

Distinct from this, a:mori, the first person plural exclusive (1PLE) pronoun, has a single form occurring in all positions.
(74) a:mori sukul ke naf-i

1PLE school LOC go-PFV
'We went to the school.'
(75) a:mori-je seo gair-inde 1PLE-ERG apple take-PFV
'We took apples.'

24 Note the difference in the forms: ta:mori [1PLI] and tomsrri [2PL].

In fast speech -i of a:mori is, at times, not heard.
(76) ra:m- $\quad$ a:mor la ajã:ro $k \varepsilon \quad d^{2} k^{h-i}$
i.name(M)-ERG 1PLE DAT darkness LOC see-PFV
'Ram saw us in the dark.'
ta:msri, the first person plural inclusive (1PLI) pronoun, too, has an invariant form in all contexts.
(77) ta:mori sukul $k \varepsilon$ naf-i

1PLI school LOC go-PFV
'We went to the school.'
(78) ta:mori-je seo garr-inds

1PLI-ERG apple take-PFV
'We took apples.'

### 3.3.2.2 Second Person

As in the first person singular, the second person singular pronoun, too, has several allomorphs: $t u$ occurs in the nominative, and the bound morphs $t \tilde{\varepsilon} \tilde{\imath}$ and $t \varepsilon$ occur with the ergative and the possessive marker, respectively.
(79) tu ores $t^{h j} j$

2SG.NOM carpenter COP.PST.M
'You (м) were a carpenter.'
(8o) tu kinnsr $k \varepsilon \quad t^{h} a k$-do
2SG.NOM p.name Loc live-HAB.M
'You (м) live in Kinnaur.'
(81) tu $\quad k^{h} a u k^{h} J$

2SG.NOM food eat.IMP
'You (polite/non-polite), eat food!'
(82) tẽ̃ $\bar{\varepsilon}-j \varepsilon \quad$ kata:b na-an-i

2SG-ERG book NEG-bring-PFV
'You did not bring the book.'
(83) $m \tilde{\varepsilon} \tilde{\imath}-j \varepsilon \quad t \varepsilon-r \supset \quad g o r \quad d \varepsilon k^{h}-\partial$

1SG-ERG 2SG-POSS.M house see-PFV.DIR
'I saw your house'

```
(84) m\tilde{\varepsilon\imath-j\varepsilon t\varepsilon-ri bo\varepsilonn d\varepsilonkh-i}
    1SG-ERG 2SG-POSS.F sister see-PFV
    'I saw your sister'
```

The allomorph tãã occurs in the dative and locative. In can also appear in the dative function without a following dative marker (86).
(85) tãũ $\quad k \varepsilon \quad \varepsilon k(k)$ gor na-i ( $t^{h j}$ )

2SG.NNOM LOC one house NEG-PFV (COP.PST.M)
'You did not have a house.'
(86) m $\underset{\varepsilon}{1}-j \varepsilon$ tã̃ $\tilde{u}$ (la) tshuŋg-i

1SG-ERG 2SG.NNOM (DAT) touch-PFV
'I touched you.'

As was the case with the first person plural pronouns, in the second person plural too, there is only one morph, tomsrri, which occurs in both nominative and non-nominative positions.
(87) tomosri $(s \varepsilon b(=\varepsilon))$ bud-i hori/pere so

2PL (all(=EMP)) old-F PL/PL.ANIM COP.PRS.2PL
'You (F) (all) are old.'
(88) tomorri-je hasal gor- $\varepsilon \quad n a f-i$

2PL-ERG early house-LOC go-PFV
'You all went home early.'

### 3.3.2.3 Third Person

As mentioned above, the demonstratives hoi and (ho)so also function as the third person singular pronouns, with both masculine and feminine referents. While hoi occurs in both nominative and non-nominative positions (e.g., 69, 89), (ho)so occurs only in the nominative position.
(89) hoi hi:dz gor-e atsh-i

3SG.PROX.NOM yesterday house-LOC come-PFV
'S/He came home yesterday.'
(90) (ho)so kinnor-o sa
3SG.DIST.nOM p.name-POSS.m Cop.PRS. 3
'He is of Kinnaur.' (from Kinnaur)

The third person singular pronoun (ho)ten occurs only in the nonnominative positions. It, too, can have masculine or feminine referents.
(91) dzetre (ho)ten-e th ${ }^{h}$ kur manuf la ru:n-э $d \varepsilon k^{h-i}$
while 3SG-ERG boy DEF.HUM DAT cry-PFV.DIR see-PFV
hoso bifarru-i
3SG.DIST.NOM be.afraid-PFV
'When she saw the boy cry, she got afraid.'
(92) (ho)tzn-k $\varepsilon k(k)$ gor sa

3SG-LOC one house cop.Prs. 3
'S/He has a house.'
(ho)tenori and honsri function as the third person plural pronouns. They occur in both nominative and non-nominative positions. There is apparently no difference in meaning between (ho)tenori and honori.

```
(93) hotenori ores (thjo)
    3PL carpenter (COP.PST.m)
    'They (м) were carpenters.'
```

(94) hotenori la tin tfe na-atsh-no tsain-ง
3PL DAT 3SG.NNOM LOC NEG-come-INF want-PFV.DIR
'They should not come here.'

### 3.3.2.4 Comparison with Other Western Pahari Languages

A comparative study of personal pronouns in Kinnauri Pahari and other Western Pahari, and also Pahari languages more generally (see Appendix 4A to this chapter) suggests that Kinnauri Pahari is very similar to other Western Pahari languages. Kinnauri Pahari, like most other Western Pahari languages, has distinct nominative and non-nominative pronouns to a large extent. In addition, the forms of the pronouns (both NOM and NNOM) are cognates in these languages. Kinnauri Pahari, however, distinguishes itself from other Western Pahari languages in one crucial way, namely, its inclusive-exclusive distinction in first person plural pronouns. ${ }^{25}$

25 Among the IA languages of the north this feature exists in only two other languages: Prasun, a language of Nuristan (Claus Peter Zoller, p.c.) and Chinali, an IA language spoken in the Lahaul region in India.
3.3.3 Interrogative Pronouns and Adverbs

The interrogative pronouns and adverbs in Kinnauri Pahari are the following.

| kun | 'who' | kjũ: | 'why' |
| :--- | :--- | :--- | :--- |
| kunkun | 'who all' | kindjo, kindzo | 'which' |
| $k i:$ | 'what' | kinds, $k i n t^{h} \varepsilon$ <br> $\varepsilon$ | 'where' |
|  |  | $k e t r \varepsilon$ | 'when' |

See also Section 5.2.

### 3.3.4 Reflexive Pronouns

The reflexive pronouns in Kinnauri Pahari are $a p$ (SG) and aphori (PL). ${ }^{26} a p$ (SG) is also, at times, realized as $a p^{h}$. They occur with all persons, numbers and genders.
(95) mẽ̃-je ap la ma:r-i

1SG-ERG SELF DAT kill-PFV
'I killed myself.' (As said, e.g., when recounting a dream.)
(96) a:mori-je aphori la marr-i
1.PLE-ERG SELF.PL DAT kill-PFV
'We killed ourselves.' (As said, e.g., when recounting a dream.)
(97) t $\tilde{\varepsilon} \imath-j \varepsilon$ ap la marr-i

2SG-ERG SELF DAT kill-PFV
'You killed yourself.' (As said, e.g., when recounting a dream.)
(98) hoteni-je ap la mar-i

3SG-ERG SELF DAT kill-PFV
'S/He killed herself/himself.'
(99) hotenori-je aphori la dukha:-ji

3PL-ERG SELF.PL DAT grief-PFV
'They hurt themselves'.

They also function as possessive reflexives.

26 In Jaunsari $a p u$ functions as the reflexive pronoun in both singular and plural (Bailey 1920).

```
(100) ama:-j\varepsilon ap-ro theldu la los-inds
    mother-ERG SELF-POSS.M boy DAT beat-PFV
    'Mother }\mp@subsup{}{1}{}\mp@subsup{\mathrm{ beat her }}{1}{}\mathrm{ son.'
(101) hoso apu-ro theldu la n\varepsilon-b\varepsilonz-do
    3SG.NOM SELF.PL-POSS.M boy DAT NEG-send-HAB.M
    'He, does not send his, sons.'
```

Apart from these invariant reflexive pronouns, the non-nominative personal pronouns can also occur in the reflexive construction in Kinnauri Pahari. While the invariant form $a p / a p^{h}$ ori is consistent with the typical IA pattern, the use of personal pronouns in the reflexive construction is similar to the ST pattern (Saxena 1984; see also Chapters 2 and 5).

```
(102) m\tilde{\varepsilon}-j\varepsilon ma na/ ap la fa-i
    ISG-ERG ISG.NNOM DAT / SELF DAT look-PFV
    'I looked at myself.'
```


### 3.4 Adjectives

The adjective precedes its head noun. Modifying adverbs precede adjectives.

### 3.4.1 Adjective Inflection

The focus here is on simple (synchronically underived) adjectives. For example:

| la:m-3 | [long-m] | $a d-\bigcirc$ | [half-m] |
| :---: | :---: | :---: | :---: |
| $k^{h} a \cdot t-\bigcirc$ | [sour-m] | patl-o | [thin-m] |
| farr-o | [beautiful-m] | mot-o | [fat-m] |
| пэทgu-ง | [new-m] | ta:t-o | [hot-m] |
| pura:n-s | [old(inanimate)-m] | bud-o | [old(animate)-m] |
| halk-o | [light-m] | fukl-o | [white-m] |
| gork-o | [heavy-m] | rait- | [red-m] |
| pur-a: | [whole(all parts of a unit)-M] | kail-s | [black-m] |
| sahukair | [rich(m/F)] | dzoan | [young(M/F)] |
| kamzır | [weak(m/F)] | garis | [poor(M/F)] |

Used attributively, i.e. in combination with a head noun, adjectives in Kinnauri Pahari display the general IA distinction between a class of "variable" and one of "invariable" adjectives (Masica 1991: 250-251).

Adjectives in the "variable" class inflect for the gender and number of their head noun. The masculine singular form ends in -0 , the feminine singular has the ending $-i$, and the plural of both genders is marked with $-\varepsilon$.

| buф̧ manuf | 'old man' | budi de:n | 'old woman' |
| :--- | :--- | :--- | :--- |
| louqs bapu | 'younger uncle' | loudi boen | 'younger sister' |
| fuklo gor | 'white house' | Jukli ba:kri | 'white female goat' |

```
(103) ba:ds bud-\varepsilon manuf-a: (hori/per\varepsilon)
    many old-PL man-PL (PL/PL.ANIM)
    'Many old men'
(104) ba:do bud-\varepsilon de:n (hori/per\varepsilon)
    many old-PL woman (PL / PL.ANIM)
    'Many old women'
```

In the remaining cases-the "invariable" adjectives-the same adjectival form occurs with both masculine and feminine head nouns in both numbers.
garismanuf 'poor man' garisb de:n 'poor woman'
sahuka:r manuf 'rich man' sahukair de:n 'rich woman'
dzoan manuf 'young man' dzoan de:n 'young girl'

```
(105) ba:ds da:ldis \({ }^{27}\) manuf
    many poor man
    'Many poor men'
(106) ba:do da:ldis de:n hori/pere
    many poor woman PL / PL.ANIM
    'Many poor women'
```

The same adjectival form occurs in both nominative and non-nominative positions.
(107) bud-o manuf hi:dz mor-i old-m man yesterday die-PFV 'The old man died yesterday.'
(108) santof- $\varepsilon$ bud-o manuf-ro gaitsh-o dsi-ji i.name(F)-ERG old-M man-Poss.M garment-PL wash-PFV 'Santosh washed the old man's clothes.'

[^80]```
val 'much' ba:do,bodi 'many'28
ssb(b) 'all' uturi: 'few, some'
(109) m\tilde{\varepsilon}-j\varepsilon utu:ri: ga:th-0 loj-i
        1SG-ERG some garment-PL buy-PFV
        'I bought some clothes.'
```

The same non-numeral quantifier adjectival form occurs with both masculine and feminine head nouns as well as with both animate and inanimate head nouns.

|  | y boys' | bodit ${ }^{\text {h }}$ eldi $(p \varepsilon r \varepsilon)$ |  |
| :---: | :---: | :---: | :---: |
| boditsorkhi (hori) | 'many birds' | bodi dzanti (hori) | 'many sto |

### 3.5 Numerals

The numerals $1-20$ in Kinnauri Pahari are clearly originally IA.

| $\varepsilon k(k)$ | 'one' | gjarra: | 'eleven' |
| :---: | :---: | :---: | :---: |
| dui | 'two' | barra: | 'twelve' |
| tron, gon | 'three' | tera: | 'thirteen' |
| tsair | 'four' | touda: | 'fourteen' |
| paits | 'five' | pandra: | 'fifteen' |
| ts ${ }^{\text {c }}$ | 'six' | solar | 'sixteen' |
| ait | 'seven' | satra: | 'seventeen' |
| $a t^{h}$ | 'eight' | (a)t $t^{\text {a }}$ : ${ }^{\text {a }}$ | 'eighteen’ |
| пои | 'nine' | unnis | 'nineteen' |
| dof | 'ten' | bief, cisa | 'twenty' |

Kinnauri Pahari has two words for 'hundred': ra (ST), ss (IA). The term for 'thousand' is hazar.

The language exhibits the vigesimal system for building higher numerals. The Hindi numerals occur frequently in day-to-day conversations. This is due to the dominant role of Hindi in the society today.

28 ba:do and bodi can both occur with nouns such as 'man', 'milk' and 'water'.

| cisa paits, bi:jo paits | [2O+5] | 'twenty five' |
| :---: | :---: | :---: |
| cisa dof, bi: $\int \mathrm{J}^{29}$ dof | [20 210$]$ | 'thirty' |
| bi:fo gjarra: | [20 +11$]$ | 'thirty one' |
| bi:jo baira: | [20 +12] | 'thirty two' |
| bi:jo tera: | [20 +13] | 'thirty three' |
| duibi:fo $\varepsilon k(k)$ | [ $2 \times 20+1$ ] | 'forty one' |
| duibi:fo dof, dve:sa dof | [ $2 \times 20+10$ ] | 'fifty' |
| tronbi:fo | [ $3 \times 20$ ] | 'sixty' |
| tronbi:fo $\varepsilon k(k)$ | $[3 \times 20+1]$ | 'sixty one' |
| tronbi:fo dui | $[3 \times 20+2]$ | 'sixty two' |
| tronbi: $\int \varepsilon$ dof | $[3 \times 20+10]$ | 'seventy' |
| tronbi:fe gjarra | $[3 \times 20+11]$ | 'seventy one' |
| tsarrbi:fe | [ $4 \times 20$ ] | 'eighty' |
| tsarrbi: $\int \varepsilon \varepsilon k(k)$ | [ $4 \times 20+2$ ] | 'eighty one' |
| tsarbit. $\mathcal{E}$ dof | [ $4 \times 20+10]$ | 'ninety' |

## 4 The Verb Complex

The verb complex in Kinnauri Pahari exhibits one of the following structures.

Copula construction: (NEG-) $\mathrm{V}_{\mathrm{COP}}(-\mathrm{SG} /-\mathrm{PL})$
Periphrastic verb forms: (nEG-)V AUX
N(NEG-) $V_{\text {Light }} A U X$
(NEG-)V-ASP (AUX)
(NEG-) $\mathrm{NV}_{\text {LIGHT }}{ }^{-A S P}$ (AUX)

There is no object marking on the verb. Subject indexing is expressed by a suffix on copulas and auxiliaries, reflecting subject person, number and gender (e.g. ma:r-en $t^{h j} j$ [kill-PROG AUX.PST.M.SG]). Gender is sometimes also expressed in an aspect suffix on the main verb. The auxiliaries are identical to the copulas used in the copula constructions, both regarding their form and their distribution, and in all likelihood historically derived from the copulas.

### 4.1 Verb Lexemes and Their Structure

Verb lexemes in Kinnauri Pahari may consist of a simplex verb (e.g. ikilns 'to drip', $p^{h}{ }^{i} k^{h} j a: n \jmath$ 'to throw') or a support verb construction consisting of a noun

29 In all these higher numerals $b i: \int 0$ and $b i: \int \varepsilon$ are equally permitted.
followed by a light verb (e.g. dusti ikil-ns [perspiration drip-INF] 'to perspire', $t^{h} u: k p^{h} i^{h}{ }^{h} a_{\text {: }}-n \jmath$ [spit( N$)$ throw-INF] 'to spit') or a complex verb consisting of a main verb followed by an auxiliary (marr-en thjo [kill-PROG AUX.PST.M.SG]). In this section the focus will be on simplex verbs.

### 4.1.1 Simplex Verbs

Some verbs are formed by affixing verbal inflectional or derivational affixes directly to a noun, adjective, or adverb stem as if it were a verb stem, in effect a form of conversion. This then is similar to what is commonly found in ST languages.

| fainins | 'to freeze (INTR)' | fain | 'ice' |
| :---: | :---: | :---: | :---: |
| siuns | 'to sew' | siu | 'tailor' |
| berims | 'to be late' | beri | 'late' |
| lonns | 'to salt' | lon | 'salt' |
| hassno | 'to laugh' | has | hass 'laugh( N )' |
| ronmains | 'to ponder' | ronmaijĩ | 'thought' |
| $b \varepsilon t^{\text {hins }}$ | 'to meet' | $b \varepsilon t^{h} i$ i | 'meeting ( N )' |
| $p^{h} u t a: n$ s | 'to make a hole' | $p^{h} u t o$ | 'hole' |

### 4.1.2 Valency Changing Mechanisms

Some generalized patterns observed in Kinnauri Pahari are as follows:
First, intransitive verbs where the verb stem ends in a consonant have corresponding transitive verbs with suffixed - $a$ : For example, dzalno 'to burn (INTR)', dzala:ns 'to burn (TR)'; lagns 'to get attached/joined' laga:ns 'to attach'; lotno 'topple (INTR), fall', bta:ns 'to topple (TR), fell'.

Second, and conversely, some transitive verbs have corresponding intransitive verbs with -ino/-i:no suffixed to the transitive stem (which itself may contain the transitivizing - $a$ : suffix).
do:no 'to burn (TR)' doins 'to burn (INTR)'
$k^{h}$ blttno 'to peel (TR)' $k^{h}$ oltfins 'to peel (INTR)'
hira:ns 'to lose (TR)' hirains 'to disappear (INTR)'

Third, as in Kinnauri (see Chapter 2), in Kinnauri Pahari too, -ja: functions as a transitivizer. It is very likely that its appearance in Kinnauri Pahari is the result of language contact, i.e., that the verbs containing it are loanwords from Kinnauri. ${ }^{30}$ The same verb in other IA languages (e.g. Kotgarhi and Hindi) does
not contain this -ja:. (but sometimes shows - $a$ :, which may indicate a historical connection between these two transitivizing suffixes). It could be analyzed as an allomorph of transitivizing -a: described above, with a lexically complementary distribution.

|  | Kinnauri Pahari | Hindi (H); Kotgarhi (K) |
| :---: | :---: | :---: |
| to vomit | poltja:no | H: palta:nar; K: poltno |
| to bury | $k^{h} a: r k \varepsilon$ dabaija:no | H: daba:na;; K: dabñ̃ 'to bury', dabaunõ 'to press down' |
| to throw | $p^{\text {hikjains }}$ |  |
| to fly | udija:ns | H: uraina:; K: raunõ 'cause to fly away' |
| to leave | fothja:ns | H: chorna:; K: Sot $\eta$ õ |
| to earn | kamaja:no | H: kama:na;; K: kamauno |
| to weigh | tolja:ns | H: tolna; K: tolno |
| to open | $k^{\text {huleja:ns }}$ | H: kolna; K: $k^{h}$ o:l $\eta$ o |
| to change | bodlja:no | H: badla:na: |
| to deceive | thakaja:no | H: thaga:na: |
| to measure | napeja:n | H: na:pna: |

### 4.2 Copulas and Auxiliaries

4.2.1 Present Tense

In the present tense the same set of copulas occurs in equational and existential copula constructions, with both masculine and feminine subjects. Several of these copulas end abruptly with a bit of aspiration at the end ([su $\left.{ }^{\mathrm{h}}\right][1 \mathrm{SG}]$, $\left.\left[\mathrm{s} \varepsilon^{\mathrm{h}}\right][2 \mathrm{SG}],\left[\mathrm{si}^{\mathrm{h}}\right][1 \mathrm{PL}],\left[\mathrm{so}^{\mathrm{h}}\right][2 \mathrm{PL}]\right) .{ }^{31}$

31 In Bailey (1920) we can find some information about the copulas in several Indo-Aryan languages of the Himalayan region. According to this information, the present tense copula form in Mandi Siraji, Eastern Mandeali, Bilaspuri, Western Bilaspuri, Northern Bilaspuri, Dami and Handuri, is a form related to $h a$. In all these languages (except Eastern Mandeali, Bilaspuri, Western Bilaspuri and Northern Bilaspuri), the copula inflects for gender and number. In the remaining languages (i.e. Rohru, Rampur dialect, Baghi dialect, Surkhuli dialect, Kuari, Barari, Bishshau, Mandi and Sukut Siraji), the copula in the present tense is either a vowel, e.g. $\bar{e}-h a i$ in Rohru (indeclinable), $\bar{a}$ in Rampur (indeclinable), or some form directly resembling the Kinnauri Pahari present tense copula, where the copula inflects for gender and number.

Copula: Present tense

|  | SG | PL |
| :--- | :--- | :--- |
| $1(\mathrm{M} / \mathrm{F})$ | $s u$ | $s i$ |
| $2(\mathrm{M} / \mathrm{F})$ | $s \varepsilon$ | $s o$ |
| $3(\mathrm{M} / \mathrm{F})$ | $s a \sim=(\varepsilon) s$ | $s a \sim=(\varepsilon) s$ |

Present tense equational copula
hãũ zimda:r su 'I am a farmer (м).'
hãũ zimda:rni su 'I am a farmer (F).'
a:morimaftorsi 'We (EXCL) are teachers (M).'
ta:mori maftorsi 'We (INCL) are teachers (M).'
tu maftor se
tomorri maftor so
hoi maftor=s / maftor sa 'He is a teacher (м).'
hotine maftor=s / maftor sa 'They are teachers (м).'

Present tense existential copula
hã̃ gor-є su 'I am at home.'
a:morigor- ssi 'We (EXCL) are at home.'
tamorri gor-esi 'We (INCL) are at home.'
tu gor-e se
toms:ri gor-є so
hoi gor-ع-s/gor-є sa
'You are at home.'
'You (PL) are at home.'
hotenori gor- $\varepsilon$-s/gor- $\varepsilon$ sa 'They are at home.'

We will now look at each present tense copula in more detail.
4.2.1.1 First Person Singular: su

As mentioned above, the copula su occurs with first person singular subjects in the present tense. It also occurs in the following construction.

```
(110) hãũ kinnor-s su
    1SG.NOM p.name-POSS.M COP.PRS.1 SG
    'I am of Kinnaur.' (I am from Kinnaur.)
```

$s u$ also functions as an auxiliary in the non-copula construction, where it follows the main verb. The main verb either is the bare verb stem or it has an aspect marker.

```
(111) hãũ thu:r su
    1SG.NOM run AUX.PRS.ISG
    'I run.'
(112) ha\tilde{u} dedjarr thurr-do su
    1SG.NOM every.day run-HAB.M AUX.PRS.ISG
    'I (m) run every day.'
(113) hãũ thurr-\varepsilonn su
    1SG.NOM run-PROG AUX.PRS.ISG
    'I am running.'
```

4.2.1.2 First Person Plural: si

The copula si occurs with first person plural (1PLE,1PLI) subjects in the present tense.
(114) ta:mori maftra:ni si

1PLI teacher.F COP.PRS.1PL
'We (F) are teachers.'
(115) ta:mori kinnor-s si

1PLI p.name-POSS.M COP.PRS.1PL
'We are of Kinnaur.' (We are from Kinnaur.)

As was the case with the copula $s u$, the copula $s i$, too, functions as an auxiliary in the noncopula construction. The main verb, here too, is either the bare verb stem or it has an aspect marker. All examples of the latter have the progressive aspect in my material.
(116) ta:mori $t^{h} u: r$ si ${ }^{32}$

1PLI run AUX.PRS.1PL
'We will run.'
$32 t^{h} u$ ur si constitutes one prosodic unit.
(117) a:mori kinnor $k \varepsilon$ na-thak-en si 1PLE p.name LOC NEG-live-PROG AUX.PRS.1PL 'We are not living in Kinnaur.'

### 4.2.1.3 Second Person Singular: $\mathrm{s} \varepsilon$

$s \varepsilon$ functions as a copula with second person singular subjects in the present tense. It also occurs in the following construction.

```
(118) tu kinnor ka se
    2SG.NOM p.name ABL COP.PRS.2SG
    'You are from Kinnaur.'
```

Further, se occurs in non-copula constructions where it functions as an auxiliary.
(119) tu gor dzurja-ndi se

2SG.NOM house make-HAB.F AUX.PRS.2SG
'You (F) build a house.'
(120) tu tsorkhi marr-en se

2SG.NOM bird kill-prog AUX.PRS.2SG
'You are killing a bird.'

### 4.2.1.4 Second Person Plural: so

The copula so occurs with second person plural subjects in the present tense in similar contexts as the copulas described above.
(121) toms:ri $s \varepsilon b=\varepsilon$ kinnor-i so

2PL all=EMP p.name-POSS.F COP.PRS.2PL
'You are all of Kinnaur.' (You are all from Kinnaur.)
(122) tomsrri kinnor $k \varepsilon t^{h} a k-\varepsilon n$ so

2PL p.name LOC live-PROG AUX.PRS.2PL
'You (PL) are living in Kinnaur.'
4.2.1.5 Third Person: sa $\sim=(\varepsilon) \mathrm{s}$

The copula $s a \sim=(\varepsilon) s^{33}$ occurs with third person (SG, PL) subjects in the present tense. $=(\varepsilon) s$ is also sometimes realized as [əs] (e.g., (52)-(54)).
$33 s a$ can also be analyzed in appropriate contexts as $=s=a(:)$ [=COP.PRS.3=Q], i.e. as expressing a polar question (see Section 5.2).

```
(123) ba:do de:ni \({ }^{34}\) pere zimdarr=s / zimdair sa
many woman.PL PL.ANIM farmer=COP.PRS. 3 farmer cop.PRS. 3
'Many women are farmers.'
(124) hoso bolo=s (/ bolo sa)
    3SG.DIST.NOM good=COP.PRS. 3 (/ good cop.Prs.3)
    'S/He is good (well).'
(125) hoso kinnor-o=s (/ kinnor-o
    3SG.DIST.NOM p.name-POSS.M=COP.PRS. 3 (/ p.name-POSS.M
    sa)
    cop.PRS.3)
    'S/He is of Kinnaur.' (S/He is from Kinnaur.)
(126) hotenori kinnor- \(\partial=s\) / kinnor-〕 sa
    3PL p.name-POSS.M=COP.PRS. 3 / p.name-POSS.M COP.PRS. 3
    'They are of Kinnaur.' (They are from Kinnaur.)
```

$=(\varepsilon) s$ also functions as an auxiliary in the non-copula construction. It is affixed to the last element in the verb complex.
(127) de:n manuf nor hori la marr-di=s woman DEF.HUM animal PL DAT kill-HAB.F=AUX.PRS. 3 'The woman kills the animals.'

Further, it also occurs in the experiencer subject construction (see Section 5.1 for details).

```
(128) ma na pantfis atsh-\varepsilonn=s
    1SG.NNOM DAT thirst(N) come-PROG=AUX.PRS.3
    'I am (feeling) thirsty.'
```

The occurrence of the present tense copula is not obligatory in Kinnauri Pahari.

```
(129) los-no bolo
    beat-INF good
    'Beating (someone) is good.'
```


## (130) hoi gor nu-a hoi saind DEM.PROX house NEG-COP.PRS DEM.Prox temple 'This is not a house; this is a temple.'

### 4.2.2 Past Tense

$t^{h} j$ functions as the (equational and existential) copula in the past tense with all persons. It has three allomorphs: $t^{h} j \partial$ (or the equally frequent variant $t^{h} \varepsilon o$ ), $t^{h} i$ and $t^{h}$. $t^{h} j$ and $t^{h} i$ occur with singular masculine and feminine subjects, respectively, while $t^{h} \varepsilon$ is used with plural subjects of both genders. ${ }^{35}$

Past tense equational copula
hãũ maftor $t^{h}{ }^{\prime}$ - 'I was (м) a teacher.'
a:mori maftorthe 'We (EXCL) were teachers.'
ta:mori maftor the 'We (INCL) were teachers.'
tu maftor $t^{h} \varepsilon o \quad$ 'You were (m) a teacher.'
tomsrri maftor $t^{h} \varepsilon \quad$ 'You (PL) were teachers.'
hoi maftor thjo 'He was (м) a teacher.'
hotenori maftor $t^{h} \varepsilon$ 'They were teachers.'

Past tense existential copula
hã̃ $\operatorname{gor-\varepsilon } t^{\text {hjo }} \quad$ 'I was (M) at home.'
a:morigor-Et ${ }^{h} \mathcal{E} \quad$ 'We (EXCL) were at home.'
ta:mori gor- $\varepsilon t^{h} \varepsilon \quad$ 'We (INCL) were at home.'
tu gor- $\varepsilon t^{\text {h }}$ عo 'You were (M) at home.'
tomorri gor- $\varepsilon t^{h} \varepsilon \quad$ 'You (PL) were at home.'
hoi gor-e thjo 'He was ( m ) at home.'
hotenori gor- $t^{h} \varepsilon$ 'They were at home.'

The past tense copulas also function as auxiliaries in the noncopula construction. The main verb here has an aspect marker.

> (131) $m a \quad n a$ həi pen bait ke por-inde thjo
> 1SG.NNOM DAT DEM.PROX pen path LOC find-PFV AUX.PST.M 'I found this pen on the path (way).'

35 Copula information for 16 Indo-Aryan linguistic varieties of the northern Himalayan regions is found in Bailey (1920). In all the languages for which we have the relevant information, the past tense copula form is related to $t^{h} j$. In some of these languages the copula in indeclinable, whereas in other languages the copula inflects for number and gender, just as in Kinnauri Pahari.

| (132) | $t u \quad$ hi:dz uturi: $p^{h} \partial l \operatorname{loj-\varepsilon n} \quad t^{h} i$ |
| :--- | :--- |
|  | 2SG.NOM yesterday some fruit buy-PROG AUX.PST.F |
|  | 'You were buying some fruits yesterday.' |

In similar constructions hunds [become.pFV.m] (feminine: hundi, plural: hunds, negative: nundo, nundi, nunde) can also occur. ${ }^{36}$
(134) hãũ raiza hunds

1SG.NOM king become.PFV.M
'I have become a king.'
(135) ta:mori ra:ni hunds

1PLI queen become.PFV.PL
'We have become queens.'
(136) hoso ra:ni hundi

DEM.DIST.NOM queen become.PFV.F
'She has become a queen.'
(137) hoso sres hundo

DEM.DIST.NOM carpenter become.PFV.M
'He has become a carpenter.'
(138) hotenori $s \varepsilon b=\varepsilon$ ores hunde

3PL all=EMP carpenter become.PFV.PL
'They have all become carpenters.'

### 4.2.3 Future Tense

The verb $p^{h}$ ir 'become' functions as a lexical verb, where it takes the usual noncopula verb inflectional endings (e.g. aspect markers).

36 hundo/hundi/hunds continue (original) present participle forms of an inherited copular verb (Sanskrit $\sqrt{ }$ BHŪ 'become’; Masica 1991: 285; Stroński 2014). This participle corresponds formally to the modern habitual form in Kinnauri Pahari. However, the semantics of hundo/hundi/hunds seem to be perfective rather than habitual. Here we have elected to gloss it as [become.PFV.M/F/PL] without further segmental analysis.
(139) tsinti: ns-bol-inds ka:m phir-ds
lie( N ) NEG-say-PFV work become-HAB.M
'Without telling lies, work gets done.'

The bare verb stem ( $p^{h}$ ir) followed by the present tense auxiliary (see Section 4.3.1) has a future tense interpretation.

| (140) | $h a \tilde{u} \quad$ maftor $\quad p^{h} i r \quad s u$ |
| :--- | :--- |
| 1SG.NOM teacher(M) |  |
| become AUX.PRS.ISG |  |
| 'I will be a teacher.' |  |

(141) hãũ maftara:ni $p^{h}$ ir $s u$

1SG.NOM teacher(F) become AUX.PRS.ISG
'I will be a teacher.'
(142) tu maftor $p^{h i r} s \varepsilon$

2SG.NOM teacher become AUX.PRS.2SG
'You (м) will be a teacher.'
(143) de:n manuf maftara:ni phir=es
woman DEF.HUM teacher(F) become=AUX.PRS. 3
'The woman will be a teacher.'
(144) $s \varepsilon b=\varepsilon$ de:n manuf(-a:) maftara:ni $p^{h} i r=\varepsilon s$
all=EMP woman DEF.HUM(-PL) teacher(F) become=AUX.PRS. 3
'All the women will be teachers.'

In the existential copula construction in the future tense the verb hugo/huge [become.fUt.SG/PL] occurs. The verb here inflects for number, where hugo occurs with singular subjects and huge occurs with plural subjects. ${ }^{37}$
hãã gore hugo 'I will be at home.'
a:mori gore huge 'We will be at home.'
ta:mori gore huge 'We will be at home.'
tu gore hugo 'You will be at home.'
tomorri gore huge 'You (PL) will be at home.'

37 There are no examples of this type with feminine subjects in my material. Again, we gloss the forms hugo/huge without further segmental analysis, even though the initial element $h u$ - is presumably the same as in hundo/hundi/hunde discussed above.
hoi gore hugo 'She will be at home.'
hotenori gore huge 'They will be at home.'
hugo/huge also occurs in the possessive construction in the future tense. It occurs with all persons in both affirmative and negative constructions.
(145) $m u \quad k \varepsilon \quad \varepsilon k(k)$ gər nu-hugo

1SG.NNOM LOC one house NEG-become.FUT.SG
'There will not be a house for me.' (I will not have a house.)
(146) tãã ke gor nu-hug刀

2SG.NNOM LOC house NEG-become.FUT.SG
'There will not be a house for you.' (You will not have a house.)
(147) hoten-tfe tsit ${ }^{h}$ i: hugo

3SG-LOc letter become.FUT.SG
'There will be a letter for him/her there.' (S/He will have a letter.)
4.2.4 Comparison with Other Western Pahari Languages

The copulas and their distribution in Kinnauri Pahari are very similar to their counterparts in other Western Pahari languages. The copulas su (and its allomorphs) in the present tense, $t^{h} j$ (and its allomorphs) in the past tense and hugo/phir which occur in future tense copula constructions are also found in other Western Pahari languages. Similarly, the past tense copula is regularly inflected for gender and number of the subject throughout the Western Pahari languages. There is however variation in the present tense copula forms in Western Pahari, even though the various forms are etymologically related. Finally, in Kinnauri Pahari, one of the present tense copula forms is also realized as a bound clitic $=s$. This is the case also in Inner Siraji and Kului (Bailey 1908). Kiunthali allows both the short variant and the longer variant. but, unlike Kinnauri Pahari, the shorter variant contains only the vowel.

### 4.3 Periphrastic Verb Forms

The auxiliaries appearing in the periphrastic verb forms are identical to the copulas used in the copula constructions, both regarding their form and their distribution, and are in all likelihood historically derived from the copulas (111113).

### 4.3.1 Aspect

Kinnauri Pahari makes a three-way aspectual distinction into habitual, progressive and perfective aspects. -di/-ndi and -do/-ndo function as the habitual aspect markers. - $\varepsilon n$ functions as the progressive aspect marker and -ind $\varepsilon$ functions as the perfective aspect marker.
4.3.1.1 The Habitual Aspect Markers -di/-ndi and -do/-ndo

The distribution of the habitual aspect markers $-d i /-n d i^{38}$ and $-d o /-n d o$ is as follows. ${ }^{39}-d i /-n d i$ occurs with animate feminine subjects and $-d o /-n d o$ (glossed as 'masculine') occurs elsewhere. The allomorphs with -n (i.e.,-ndi and -ndo) occur when the verb stem ends with a vowel and the allomorphs without $-n$ (i.e., -do and -di) occur elsewhere. ${ }^{40}$ The habitual aspect markers occur with all persons and numbers. The aspect-marked verb is optionally followed by an auxiliary in the present and past tenses.

```
(148) ha\tilde{u} roti k khas-ndi (su/ thi)
    1SG.NOM bread eat-HAB.F (AUX.PRS.ISG / AUX.PST.F)
    'I eat bread / ate bread.'
```

(149) a:mori $k^{h} a u \quad k^{h} a i-n d i \quad$ (si)
1PLE food(N) eat-HAB.F (AUX.PRS.1PL)
'We eat food.'
(150) hãũ tflz na-an-ds (su/thjo)
1SG.NOM thing NEG-bring-HAB.M (AUX.PRS.1SG / AUX.PST.M)
'I do(/did) not bring things.'
(151) ra:m mohan la kata:b de-ndo(=s /
i.name(M) i.name(M) DAT book give-HAB.M(=AUX-PRS.3/
$\left.t^{h} j 0\right)$
AUX.PST.M)
'Ram gives(/gave) Mohan a book.'

The habitual aspect markers also occur in the relative clause construction (see Section 5.4) and in the adverbial construction. The distribution of the habitual aspect markers in the relative clause construction remains the same as

[^81]described above. The habitual aspect marker in the relative clause construction is followed by the relative clause pronominal suffix (-sja:/-se:) and a head noun.

The gender distinction is manifested here both in the choice of the aspect marker (-do/-ndo vs. -di/-ndi) and in the choice of the relative clause pronominal suffix (-sja: vs. $-s e x)$. When the relative clause is a transitive clause, the factors determining the occurrence of the case marking on the direct object in the relative clause are the same as in the simple finite clause.
(152) los-do-sja: manuf
beat-HAB.M-REL.M man
'The man who beats'
(153)

$$
\begin{aligned}
& \text { ru:n-ds-sja: } \quad t^{h} \jmath \text { kur } \\
& \text { cry-HAB.M-REL.m } \\
& \text { 'Thild(м) } \\
& \text { 'The boy who cries' }
\end{aligned}
$$

In the absence of a head noun, the nominal inflectional endings, where relevant, are affixed to -sja:.

| (154) | dura ka:t-do-sjai- $\varepsilon$ | bol-o |
| :--- | :--- | :--- |
| wood cut-hAB.M-REL.M-ERG say-PFV.DIR |  |  |
|  | 'The wood-cutter said.' |  |

The following examples illustrate the habitual aspect marker occurring in temporal adverbial subordinate clauses. Since these are constructed with $b \varepsilon r-\varepsilon$ [time(F)-LOC] obligatorily following the non-final verb with the habitual aspect marker, the marker appears in its feminine form.
(155) m $\tilde{\varepsilon} \check{-}-j \varepsilon$ hand-(q)i ber- $\quad$ hoi bol-o

1SG-ERG walk-HAB.F time-LOC DEM.PROX say-PFV.DIR
'At the time of walking, I said'
(156) vikram-je hand-(d)i ber-e hoi bol-o
i.name(M)-ERG walk-HAB.F time-LOC DEM.PROX say-PFV.DIR
'At the time of walking, Vikram said.'

### 4.3.1.2 Progressive Aspect

The progressive aspect marker - $\varepsilon n$ is affixed to the main verb. It, too, can be optionally followed by an auxiliary.

```
(157) hã\tilde{u} ka:le fimla: naf-\varepsilonn (su)
    1SG.NOM tomorrow p.name go-PROG (AUX.PRS.1 SG)
    'I am going to Shimla tomorrow.'
(158) a:mori kinnor k\varepsilon thak-\varepsilonn (si)
    1PLE p.name LOC live-PROG (AUX.PRS.1PL)
    'We are living in Kinnaur.'
(159) de:n manuf p}\mp@subsup{p}{}{h
    girl DEF.HUM fruit NEG-request.take-PROG (AUX.PST.F)
    'The girl was not requesting to take fruit.'
(16o) kukur ghu\etag-\varepsilonn-s
    dog bark-PROG-AUX.PRS. }
    'The dog is barking.'
```

The progressive aspect marker also occurs in the present adverbial constructions. In such instances the non-final clause may be followed by a discourse marker $p 0$, which seems to add an element of surprise.
(161) m $\tilde{\varepsilon} \imath-j \varepsilon \quad t^{h} \supset k u r$ la $k^{h} \varepsilon l-\varepsilon n \quad$ (pっ) $d \varepsilon k^{h}-\jmath$ 1SG-ERG child(M) DAt play-PROG (DSM) see-PFV.DIR 'I saw the boy playing!' (I saw the boy while he was playing.)
(162) dzetre (hoso) bol-غn (po) hoso khuŋg-o
while (DEM.DIST.NOM) say-PROG (DSM) 3SG.NOM cough-PFV.DIR 'While saying (that), he coughed!'

## (163) t $\tilde{\varepsilon} \check{\iota} j \varepsilon$ ha:s- $\varepsilon n$ (po) bol-i

2SG-ERG laugh-PROG (DSM) say-PFV
'You spoke laughingly.'

### 4.3.1.3 Perfective Aspect

There seem to be two sets of perfective aspect markers: (i) -ind $\varepsilon /-n d \varepsilon$ and (ii) $-\Omega$ and $-i$. Both may optionally be followed by an auxiliary.

The perfective aspect marker -ind $\varepsilon /-n d \varepsilon$ occurs with all persons, numbers and genders. After a consonant-final verb stem, the form of the marker is -inde. When the verb stem ends in a vowel, some variation is found in the form of the perfective aspect marker. It is realized as -jind $\varepsilon$, -ind $\varepsilon$ or $-n d \varepsilon$. The subject in the clauses containing the perfective aspect marker can be in the nominative
and the ergative, and it also appears with so-called experiencer subjects (see Section 5.1).
(164) raim $d u k^{h}-i n d \varepsilon=s$
i.name(M) sick-PFV=AUX.PRS. 3
'Ram has been sick.'
(165) tshori pere ba:do baite bata:-nde/bata-jinde
girl PL.ANim many talk( N ) talk-PFV
'The girls talked a lot.'
(166) thokur pere tã̃ la bolo kola-nde(=s)
child(M) PL.ANIM 2SG.NNOM DAT good like-PFV(=AUX.PRS.3)
'The boys liked you.'
(167) $\quad$ ku rupja: hirav-ind $\varepsilon=s$

1SG.NNOM ABL money lose(NVOL)-PFV=AUX.PRS. 3
'Money got lost from me.' (I lost (some) money.)
(168) a:mori-je se gar-inds ( $t^{h} j \partial$ )

1PLE-ERG apple take-PFV (AUX-PST.M)
'We took apples.'
(169) me-ro haith ufa-jinds ( $t^{h j o) ~}$

1SG-POSS.M hand swell.Intr-PFV (AUX-PST.M)
'My hand had some swelling.'
(170) tẽ̃-je hoi ka:du fun-inds se

2SG-ERG DEM.PROX when hear-PFV AUX.PRS.2SG
'When did you hear this?'

When the verb stem ends with a nasal, the perfective aspect marker -ind $\varepsilon$ is, at times, realized as -ide. While the language consultants always accepted replacing -id $\varepsilon$ with -ind $\varepsilon$, without any apparent difference in meaning; they did not accept replacing -ind $\varepsilon$ with -id $\varepsilon$ with stems ending in non-nasal consonants.
(171) borba- $\quad b^{h}$ arr-د gin-ide/gin-inde
father-ERG weight-PL carry-PFV
'Father carried the bagage.'

```
(172) mẽ̌-j\varepsilon ta:t-د dakkhan tsu\eta-id\varepsilon/tsu\eta-ind\varepsilon
    1SG-ERG warm-m lid carry-PFV
    'I lifted the warm cover.'
(173) me-ro tsheldu-j\varepsilon fol bun-id\varepsilon/bun-ind\varepsilon
    1SG-POSS.m boy-ERG shawl weave-PFV
    'My son wove a shawl.'
(174) me-ri tsheldi-j\varepsilon fol bun-id\varepsilon/bun-inds
    1SG-POSS.F daughter-ERG shawl weave-PFV
    'My daughter wove a shawl.'
```

The perfective aspect marker also occurs on the non-final verb in the clause chain construction.

```
(175) ra:m-\varepsilon dzut-inde gor zala:-ji
    i.name(M)-ERG drink-PFV house burn(TR)-PFV
    'Ram drank and (then, he) burnt the house.'
```

(176) gor bond no-kor-inde ra:m baza:r naf thjo
house close nEG-do-PFV i.name(m) market go AUX.PST.M
'Without closing (his) house, Ram went to the market.'

Kinnauri Pahari also seems to have a double-finite construction with a past tense/perfective interpretation, where $-\supset$ or $-i^{41}$ is suffixed to the verb. This verb may then be followed by an auxiliary. These suffixes occur in the non-copula construction with all persons, numbers and genders, in both agentive and nonagentive clauses in affirmative and negative sentences. The subjects in such constructions can have the nominative or the non-nominative form.

The distribution of $-\supset$ and $-i$ is not correlated with the gender of the subject, but rather it is semantically determined, where -o occurs when the speaker has direct knowledge of the situation, and $-i$ occurs when the speaker either does not want to reveal the source of the information or does not wish to claim to have first-hand knowledge.

[^82](177) bu:do manuf hi:dz mor-i/ mor-o ( ${ }^{h} j$ )
old man yesterday die-PFV / die-pFV.DIR (AUX.PST.m)
'The old man died yesterday.'
(178) hoso bot pat bef-i/ bef-o

DEM.DIST.NOM tree under sit-PFV/ sit-PFV.DIR
'S/He sat under the tree.'
(179) vikram-e get na-lja-i/ na-lja-ว
i.name(M)-ERG song NEG-sing-PFV / NEG-sing-PFV.DIR
'Vikram did not sing a song.'

The suffix - $i$ (but not $-\Im$ ) also occurs on the non-final verb in adverbial clauses. In several (though not all) such constructions pith $h$ 'after' follows the adverbial clause.
(180) sunts-i pith $u$ bol-no
think-PFV after say-INF
'Speak after thinking!' (Think before you speak!)
(181) hoten-je kaphra lov-i ${ }^{42}$ pith $u$ kami:z dzurja-o/ dzurja-ji 3SG-ERG cloth buy-PFV after shirt make-PFV.DIR/make-PFV 'He made a shirt after buying the cloth.'
(182) na-fa-ji no-bol-no

NEG-look-PFV NEG-say-INF
'One should not speak without looking.'

In short, the finite verb inflectional endings in Kinnauri Pahari, as we have seen here are, to some extent, sensitive to the gender of the subject. This is distinct from Kinnauri, which also has subject markers, but where the subject marker is not sensitive to the gender of the subject. Further, unlike Kinnauri, Kinnauri Pahari does not have "object" indexing. Thus, the verb endings in the following two Kinnauri Pahari examples remain the same.

$$
\begin{aligned}
& \text { (183) ama:-je ap-ro tsheldu la los-inde } \\
& \text { mother-erg Self-poss.m boy Dat beat-PFV } \\
& \text { 'Mother beat (her) own son.' }
\end{aligned}
$$

```
(184) ama:-j\varepsilon ma la los-ind\varepsilon
    mother-ERG iSG.NNOM DAT beat-PFV
    'Mother beat me.'
```


### 4.4 Negation

Kinnauri Pahari has two negative morphemes: $n a$ - and $m a-$ - $n a$ - is the default marker. It negates assertions. It occurs with all persons and numbers in both copula and non-copula constructions. In the past tense copula constructions $n \varepsilon i$ (variant: $n a-i)^{43}$ precedes the copulas. The negative marker $m a-$, on the other hand, occurs predominantly in the prohibitive construction (see below), but the negative marker $n a$ - can also occur in prohibitives. ${ }^{44}$ The distribution of the negative markers in Kinnauri Pahari is, thus, similar to the pattern found in many other IA languages.

For the most part-but not always-the negative marker $n a$ - is realized as a bound affix. Further, its vowel quality often assimilates to the vowel quality of the first syllable of the verb to which it is prefixed, as can be seen in many of the examples provided below.

Equational copula (negative): Present tense
hãũ maftor nu-su 'I am not a teacher.'
ams:ri maftorni-si 'We (EXCL) are not teachers.'
ta:mori maftorni-si 'We are not teachers.'
tu maftor nu-se 'You are not a teacher.'
tomo:ri maftor nu-so 'You (PL) are not teachers.'
hoi maftor nu-a ${ }^{45}$ 'He is not a teacher.'
hotenori maftor nu-a 'They are not teachers.'

Equational copula (negative): Future tense
hãũ maftor ni-phir su 'I will not be a teacher.'
amorri maftor ni-phir si 'We (EXCL) will not be teachers.'
tamori maftor ni-phirsi 'We (INCL) will not be teachers.'
tu maftor ni-phir se 'You will not be a teacher.'
tomorri maftor ni-phir ss 'You (PL) will not be teachers.'
hoi maftor ni-phir-es 'He will not be a teacher.'
hotenori maftor ni-phir-es 'They will not be teachers.'

[^83]Existential copula (negative): Future tense
hã̃̃ gər-є nu-hugo 'I will not be at home.'
amэri gor-є nu-huge 'we (EXCL) will not be at home.'
tamsrri gor-в nu-huge 'we (INCL) will not be at home.'
tu gər-є nu-hugo 'You will not be at home.'
tomorri gor-є nu-huge 'You (PL) will not be at home.'
hoi gэr-є nu-hugs 'He will not be at home.'
hotenori gor-є nu-hug-є 'They will not be at home.'

The allomorph distribution of $n a$ - in non-copula constructions (final as well as non-final clause verb) remains the same as described above.
(185) $t^{\text {h}}$ วkur $p e r \varepsilon$ bra:g na-ma:r-i
child(M) PL lion NEG-kill-PFV
'The boys did not kill the lion.'
(186) lik $^{h}-i \quad$ pit ${ }^{h} u$ ra:m nu-sut-o
write-PFV after i.name(M) NEG-sleep-PFV.DIR
'Ram did not sleep, after writing (the letter).'
(187) a:ms:ri na-k ${ }^{h} a-j \varepsilon n ~ s i$

1PLE NEG-eat-PROG AUX.PRS.1PL
'We are not eating.'
(188) tsinti: no-bol-inds $\operatorname{ket}^{h} \varepsilon \quad n i-p^{h} i r-d o$
lie(N) NEG-say-PFV anything NEG-become-HAB.M
'Without telling a lie, nothing gets done.'

### 4.5 Imperative and Prohibitive

4.5.1 Imperative

The bare verb stem—without an auxiliary—expresses the imperative. No hon-orific-non-honorific distinction is made here.
(189) (tu) bazar- $\varepsilon \quad n a f$
(2SG.NOM) market-LOC go
'(You (н/NH)) go to the market!'
(190) $k^{h}$ ou $k^{h} \partial$
food eat
'Eat the food!'

```
(191) intf \(\varepsilon b^{h} \varepsilon \int\)
    here sit
    'Sit here!'
(192) \(t^{h} u: r\)
    run
    'Run!'
(193) upt
    tear.down
    'tear down (the paper)!'
```

4.5.2 Prohibitive
The negation markers $m a$ - and $n a$ - are added to the imperative to form the pro-
hibitive. As mentioned above, while $m a$ - only occurs in the prohibitive, $n a$ - is
a general negation marker. In all the following examples $n a$ - can be replaced
by $m a$-. However, one language consultant permitted only $n a$ - in prohibitive
constructions.
(194) pa:ni ni-pju / ma-pju
water NEG-drink
'Don't drink the water!'
(195) nu-ru/ma-ru
NEG-cry
'Don't cry!'
(196) intf $\varepsilon \quad n \varepsilon-b^{h} \varepsilon / m a-b^{h_{\varepsilon S}}$
here neg-sit
'Don't sit here!'

## $5 \quad$ Clauses and Sentences

As illustrated by the examples already given in this chapter, the default word order in Kinnauri Pahari is SOV. Other word orders are also attested, though they are less frequent.


### 5.1 Experiencer Subjects

Kinnauri Pahari has a construction which is widespread in South Asia, and which in the South Asian context is referred to as the experiencer subject construction (or the dative subject construction). Rather than ergative or nominative, we encounter numerous cases where the dative case marker occurs on the "subject" of a clause when this does not refer to a volitional participant.
(198) ra:m la $\varepsilon k(k)$ kata:b por-i
i.name(M) DAT one book find(NVOL)-PFV
'Ram found a book.'
(199) tãa $u$ la mithaij pasand sa

2SG.NNOM DAT sweets like AUX.PRS. 3
'You like sweets.'

```
(20o) ma na dzao atsh-\varepsilonn-s
    1SG.NNOM DAT thirst(N) come-PROG-AUX.PRS.3
    'I am thirsty.'
```

The experiencer subject also occurs in constructions which describe a bodily state or condition. ${ }^{46}$
(201) tin la thand-is

3SG.NNOM DAT cold-AUX.PRS. 3
'He (distant, non-visible) is cold.'

```
(202) ma na dukh-\varepsilonn thjo
    1SG.NNOM DAT grief-PROG AUX.PST.M
    'I was hurting.'
```

The experiencer subject also occurs in the obligative construction.
(203) tã̃u la tin-the naf-no tsa:n-do=s / tsa:n-do (sa/t thjo)

2SG.NNOM DAT there-LOC go-INF want-HAB.M=AUX-PRS. 3
'You ought to go there.'

46 There is a parallel construction with a nominative subject. Unlike the experiencer subject construction, this construction does not highlight the non-volitional participation of the subject: hoso duk ${ }^{\text {h-o }}$ [3SG.DIST.nom grief-PFV.DIR] 'he got sick.'

However, the experiencer subject does not control verb inflection, e.g. the selection of the habitual aspect marker (-do/-ndo or -di/-ndi) and the past tense copula form $\left(t^{h} j\right.$, $t^{h} i$ or $\left.t^{h} \varepsilon\right)(199,200,203)$.

### 5.2 Questions

As the following examples illustrate, the verb inflection and the word order in content questions remain the same as in the declarative sentences.

```
(204) hoi tã\tilde{u} la kun-j\varepsilon bol-i
    DEM.PROX 2SG.NNOM DAT who(SG)-ERG say-PFV
    'Who told you this?'
(205) tenor-j\varepsilon tãũ la ki bol-o
    3PL-ERG 2SG.NNOM DAT what say-PFV.DIR
    'What did they tell you?'
(206) t\tilde{\varepsilon}\tilde{\imath}\varepsilon\mp@code{tin la kind\varepsilon d\varepsilonkh-i}
    2SG-ERG 3SG.NNOM DAT where see-PFV
    'Where did you see him?'
(207) tu d\varepsilon\int k\varepsilon kjũ: atsh-i
    2SG.NOM village LOC why come-PFV
    'Why did you come to the village?'
(208) m\varepsilon-ro gor ketr\varepsilon d\varepsilonk}\mp@subsup{k}{}{h-\jmath
    1SG-pOSS.M house when see-PFV.DIR
    'When did (you) see my house?'
```

As in content questions, in polar questions, too, the word order and verb inflection remain the same as in declarative sentences, with the difference that the question enclitic $=a:$ is added to the clause final element.

```
(209) tu kinnor ka=a:
    2SG.NOM p.name ABL=Q
    'Are you from Kinnaur?'
```


### 5.3 Conjunction and Disjunction

ai functions as the conjunctive coordinator at the phrasal and clausal levels, while $=s i$ functions as the conjunctive coordinator only in noun phrases.
(210) hãũ $k^{h} a u$ tfa:n-غn su ai $k^{h} a-j \varepsilon n$
1.SG.NOM food cook-PROG AUX.PRS.ISG CONJ eat-PROG
su
AUX.PRS.1SG
'I am cooking and eating.'
(211) mẽ̃̃-je $\varepsilon k(k)$ bod-o la:l gor=si $\quad d \supset k^{h} r \supset$ loj-i

1SG-ERG one big-m red house=CONJ field buy-PFV
'I bought one big red house and field.'
(212) $\operatorname{raim}(-\varepsilon) \quad$ gor=si dokhro loj-ว
i.name $(\mathrm{M})(-$ ERG $)$ house=CONJ field buy-PFV.DIR
'Ram bought the house and the field.'
$j a:$ functions as the disjunctive coordinator, both at the noun phrase level as well as at the clause level. In constructions with more than two disjunctive clauses, ja: may optionally occur before each clause.
(213) hãũ ra:mpur ja: fimla nafsu

1SG.NOM p.name DISJ p.name go AUX.PRS.ISG
'I will either go to Rampur or to Shimla.'
(214) ra:m gor ja: $\quad \not \supset k^{h} r o ~ b o j=\varepsilon s$
i.name(M) house DISJ field buy=AUX.PRS. 3
'Ram will either buy the house or the field.'
(215) ja: ra:m naf=es ja: suradz naf=es

DISJ i.name(m) go=AUX.PRS. 3 DISJ i.name(M) go=AUX.PRS. 3
'Either Ram will go or Suraj will go.'
(216) hãũ sut su ja: ka:m khrt su

1SG.NOM sleep AUX.PRS.1SG DISJ work(N) do AUX.PRS.1SG
'I will either work or sleep.'

### 5.4 Relative Clauses

The relative clause suffix is sensitive to gender, where -sja: occurs with masculine referents and -se: occurs with feminine referents. It can be affixed at least to the habitual-aspect verb form in -di/-ndi/-do/-ndo (217-218) (see also Section 4.3.1.1) and to the infinitive (functioning as a deverbal noun: 219-222).
(217) $k^{h}$ i:r de-ndi-se: ba:kri
milk give-HAB.F-REL.F goat(F)
'The goat which gives milk'
(218) ijandandub la tsan-di-se: de:n
i.name(M) DAT want-HAB.F-REL.F woman
'The woman who likes Iyandadub’
(219) manuf-ro l(i)jai-no-sja: get
man-Poss.m sing-INF-REL.M song
'The song which is sung by a man/the man'
(220) raiza-ro pai-no-sja: hat ${ }^{h}$ :
king-poss.m hold-INF-REL.M elephant
'The elephant (M) which is to be caught by the king'
(221) ra:mi-ro $p^{h} \jmath$ l de-no-se: de:n ma:nuf
i.name(F)-POSS.M fruit give-INF-REL.F woman DEF.HUM
'The woman to whom Rami gives the fruit'
(222) ra:za la pai-nл-se: de:n ma:nuf
king DAT catch-INF-REL.F woman DEF.HUM
'The woman who catches the king'
The relative clause suffix also occurs in the correlative relative clause construction. In this construction the head noun, followed by a relative pronoun (e.g. $d z a s$ in 223-224) precedes the modifying clause, while the relative clause suffix is affixed to the verb of the modifying clause. The distribution of -sja: and -se: remains the same as described above.
(223) manuf dzas la ${ }^{47}$ mithaij $d \varepsilon$-ns-sja: $^{2}$
man CRL DAT sweet give-INF-REL.M
'The man to whom the sweets are to be given'

# (224) de:n manuf dzas la mithaij de-no-se: woman DEF.HUM CRL DAT sweet give-INF-REL.F 'The woman to whom the sweets are to be given' 

(225) gila:s dzin la ban-nл-sja: glass CRL DAT break-INF-REL.M 'The glass which is to be broken'

[^84]
## Appendix 4A: Some Comparisons between Kinnauri Pahari and Other Pahari Languages ${ }^{48}$

## 4A. 1 Dative and Locative Markers

The table shows the dative and locative case markers in Kinnauri Pahari compared with other Pahari languages (source: LSI 9:4, Grierson 1928).

| Language (LSI 9:4 page refs) | Dative | Locative |
| :---: | :---: | :---: |
| Baghati (495-505) | khe: | me', mẽ̃, manjhe: 'in'; de: 'in, on'; pã:de: 'on'; pa:e: 'on' |
| Chambeali (769-784) | jo: (this is old Loc ja:); tikar 'for'; kari: 'on account of' | $e:($ same as ERG); bichch; mañjh |
| Gaddi (792-8o3) | jor; bor; go: 'to' or 'for' | $e:($ same as ERG); mañjh; mã:; ma:h; malle: 'near' |
| Gujuri of Hazara (930-934) | $n a ; k e:$ | mã: 'in'; bichch 'in'; ta:rũ: 'up to' |
| Jaunsari (383-400) | kh | mũ:jh 'in'; pũ:da: 'in'; dã: ‘on'; chh 'on, upon'; bhe:r 'near'; d'a:iya: 'near' $^{\text {n }}$ |
| Kumaoni (108-157) | kaṇi, kaĩ, thaĩ (or thẽ:); huṇi, hũ:; su:; | -mẽ: (or -me:) 'in'; par 'on'; jã:lai |
| Kiunthali (549-574) | khe:, ha:ge:, ge:, ri: te:i,', ri: kha:tar 'to' or 'for' | e: + da: / dor; mã:je:\| |
| Kinnauri Pahari (this chapter) | la, na | $k \varepsilon,-\varepsilon$ |
| Kului (670-679) | bé 'to' | na 'in'; móñjhe: or maiñje: 'in' |
| Mandeali (721-728) | jor; kane: | mañjh or mañjha: |
| Nepali (46-55) | -lasi | -ma: (allomorphs: ma, ma: or mã:) |
| Sirmauri Dharthi (458-467) | khe:, ge: | da: 'in'; mo: 'in'; pã:de: 'on' |
| Sirmauri Giripari (477-486) | khe:; e:kh, ge:; ri: (re:)-taĩ: | dai; me:; mũ:je: 'in'; ge:ś; ge:śis; ga:śi: 'on' |

48 All languages in this comparison are classified as Western Pahari except Kumaoni (Central Pahari) and Nepali (Eastern Pahari).

## 4A. 2 Pronouns

The following table shows the SAP pronouns in Kinnauri Pahari in comparison to other Pahari languages (source LSI 9:4, Grierson 1928).

|  | Kinnauri Pahari | Other Pahari languages |
| :---: | :---: | :---: |
|  | $\begin{aligned} & h \tilde{a} \tilde{u} \text { (NOM) } \\ & m \tilde{\varepsilon} \tilde{\iota}-m \varepsilon-, m a \\ & (\text { NNOM }) \end{aligned}$ | Distinct nominative and non-nominative pronouns are also found in Jaunsari, Sirmauri-Dharthi, Sirmauri-Giripari, Bhagati, Mandeali, Chameali, Gadi, Pangwali, Bhadrawahi-Bhalesi, Gujuri of Hazara. The forms, too, in these languages are similar to those of Kinnauri Pahari. <br> The languages which deviate from this are Kumaoni (Central Pahari) and Nepali (Eastern Pahari). In both these languages, $m+$ vowel occurs for both NOM and nNOM. |
|  | $\begin{aligned} & t u(\mathrm{NOM}) \\ & t \tilde{\varepsilon} \tilde{\imath}-, t \varepsilon-, t \tilde{a} \tilde{u}(\mathrm{NNOM}) \end{aligned}$ | Distinct nominative and non-nominative pronouns are also found in Kumaoni, Jaunsari, Sirmauri-Dharthi, Sirmauri-Giripari (partly), Bhagati (for the most part), Kiunthali, Kului, Mandeali, Chameali, Gadi, Pangwali, BhadrawahiBhalesi, Gujuri of Hazara. The forms, too, in these languages are similar to those of Kinnauri Pahari. <br> Nepali (Eastern Pahari) is the only language which deviates from this. It uses the same form for both NOM and NNOM. |
|  | $\begin{aligned} & \text { a:mori (1PLE) } \\ & \text { ta:mori (1PLI) } \end{aligned}$ | No other language exhibits the EXCL-INCL distinction. <br> The 1PLE pronoun in Kinnauri Pahari form may be related to the first syllable of the 1PL form in the following languages: Nepali, Kumaoni, Jaunsari, SirmauriDharthi, Sirmauri-Giripari, Bhagathi, Kiunthali, Gujuri of Hazara. <br> In the following languages, a completely different form (asse) occurs: Kului, Mandeali, Chameali, Gadi, Pangwali and Bhadrawahi |
| 2PL | toms:ri | tũ $(m) /$ timi/tum occurs in Nepali, Kumaoni, Jaunsari, Sirmauri-Dharthi, SirmauriGiripari, Bhagati, Gujuri of Hazara (except GEn). <br> tus occurs in Mandeali, Chameali (except GEn, where tum occurs), Gadi (except GEN), Pangwali (except GEN), Bhadrwahi. <br> In Kului and Kiunthali both forms (tum, tus) occur in parallel. |

## Appendix 4B: Kinnauri Pahari Basic Vocabulary <br> (by Anju Saxena and Vikram Negi)

This is the Kinnauri Pahari IDS/LWT list. It has been compiled on the basis of the 1,310 items of the original Intercontinental Dictionary Series concept list (Borin et al. 2013) plus the 150 items added to it in the Loanword Typology project, for a total of 1,460 concepts (Haspelmath and Tadmor 2009). Further, some new entries have also been added in the present project. In the latter the minor part of their concept ID (the part after the point) begins with "999", e.g. "S24.99910 someone". There are 12 such additions in the Kinnauri Pahari list. Some IDS/LWT items have been left out from this list, as there were no equivalents in Kinnauri Pahari or in my material. The resulting list as given below contains 1,215 items (concepts). The list also includes loanwords.

## 4B. $1 \quad$ Notational Conventions

For ease of comparison we have kept the original IDS/LWT glosses unchanged in all cases, and Kinnauri Pahari senses which do not fit the IDS/LWT meaning completely are given more exact glosses in the Kinnauri Pahari column. Sometimes there will be multiple (separately glossed) items in the Kinnauri Pahari column when Kinnauri Pahari exhibits lexical differentiation of meaning or form within an IDS/LWT item. Pronunciation or form variants are separated by commas, and formally distinct items are separated by semicolons. Glosses and notes belong with their enclosing "semicolon grouping".

As in the main text, Kinnauri Pahari items are set in italics without morphological decomposition, i.e. affixes and clitics are written solid with their stem or host. Glosses are set in roman, either in single quotes (translation, corresponding to the last line in an interlinear glossed text unit) or in square brackets (morphological analysis, corresponding to the middle line in interlinear glossed text, and adhering to the Leipzig Glossing Rules, in some cases preceded by a morphologically segmented representation of the Kinnauri Pahari item in italics, corresponding to the first line in interlinear glossed text). In a few instances, alternative pronunciations of Kinnauri Pahari items are indicated by phonetic transcriptions in square brackets.

Unless otherwise indicated, here we will provide the default form (e.g., only the singular form of nouns, the masculine singular form of adjectives, and the nominative form of pronouns). Borrowings from Kinnauri are indicated by "(Kinn.)" after the item in question in the Kinnauri Pahari column.

## 4B. $2 \quad$ The Kinnauri Pahari IDS/LWT List

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| So1.100 | the world | dunija: |
| So1.210 | the land |  |
| So1.212 | the soil | matti |
| So1.213 | the dust | dandorij; di: 'dirt; dust' |
| So1.214 | the mud | tsaraio |
| So1.215 | the sand | ba:lu |
| So1.220 | the mountain or hill | $d \tilde{o}: k^{h}$ (with bare rock); $k \tilde{q} \not{ }^{\prime} o$ (grasscovered) |
| So1.240 | the valley | $p^{\text {ajajul }}$ |
| So1.270 | the shore | kana:re |
| So1.280 | the cave | udarr; dabar 'big hole; cave' |
| So1.310 | the water | paini |
| So1.320 | the sea | samuddar |
| So1.322 | calm | sululu |
| So1.323 | rough(2) | $k^{h} a d u l a:$ |
| So1.324 | the foam | fuptso |
| So1.330 | the lake | til '(larger) pond'; ss:r '(smaller) pond' |
| So1.360 | the river or stream | gair |
| So1.362 | the whirlpool | furrinds paini |
| So1.370 | the spring or well | sorr 'spring'; kuay [kũã] 'well' |
| So1.380 | the swamp | tsaytso |
| So1.390 | the waterfall | $t^{\text {hoday }}$ |
| So1.410 | the woods or forest | dzaygal |
| So1.430 | the wood | dura: |
| So1.440 | the stone or rock | dzanti (a commonly found stone in Sangla); d ${ }^{2}: k^{h}$ 'large rock'; fi:l 'grinding stone' |
| So1.450 | the earthquake | muntsu:liy |
| So1.510 | the sky | sargo |
| So1.520 | the sun | dius |
| So1.530 | the moon | dzot |
| So1.540 | the star | ta:ro |
| So1.550 | the lightning | bidzul |
| So1.560 | the thunder | gurgur |
| So1.580 | the storm | dzor bagur |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| So1.590 | the rainbow | tiralmets |
| So1.610 | the light | pjã:/o |
| So1.620 | the darkness | ãjarrs 'darkness, dark' |
| So1.630 | the shade or shadow | la:t ${ }^{\text {a }}$ : ['laa., tf ${ }^{\text {hat] }}$; fela:o |
| So1.640 | the dew | of |
| So1.710 | the air | bagur |
| So1.720 | the wind | dzor(s) bagur |
| So1.730 | the cloud | dзu:; fodzu: 'snow/rain cloud'; baldo 'storm cloud' |
| So1.740 | the fog | duma:so |
| So1.750 | the rain | goen |
| So1.760 | the snow | hiũ |
| So1.770 | the ice | fa:n |
| So1.7750 | to freeze | fa:nins (INTR) |
| So1.780 | the weather | mosam |
| So1.810 | the fire | $a: g$ |
| So1.820 | the flame | lemkay |
| Sol. 830 | the smoke | dư: |
| So1.8310 | the steam | ba:p |
| So1.840 | the ash | tsha:r; bosom |
| So1.841 | the embers | aygarr 'embers; coal' |
| So1.851 | to burn(1) | do:ns; dzala:ns (TR) |
| So1.852 | to burn(2) | doins; dzalno (INTR) |
| So1.860 | to light | dzala:no |
| So1.861 | to extinguish | (a:g) hita:no |
| So1.870 | the match | mesay |
| So1.880 | the firewood | dzalno dura: [burn(INTR).INF wood] |
| So1.890 | the charcoal | $\begin{aligned} & \text { rello ayga:r (rel-ro ayga:r [train.poss.м } \\ & \text { coal]) } \end{aligned}$ |
| So1.99903 | the coal | ayga:r |
| So2.100 | the person | manuf |
| So2.210 | the man | pufã: |
| So2.220 | the woman | de:n (adult); dzk ${ }^{\text {hore }}$ (young) |
| So2.230 | male(1) | pofo |
| So2.240 | female(1) | bi:dz |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| So2.250 | the boy | tshokur; tshokru 'boy of up to around 10 years of age' |
| So2.251 | the young man | dsk ${ }^{\text {r }}$ rats |
| So2.260 | the girl | tshkri |
| So2.261 | the young woman | dzoan de:n |
| So2.270 | the child( 1 ) | tshour |
| So2.280 | the baby | loudo ts ${ }^{\text {c }}$ ldu |
| So2.310 | the husband | pufã: |
| So2.320 | the wife | de:n |
| So2.330 | to marry | fa:di: korno |
| So2.340 | the wedding | dsane:tj; fa:di: |
| So2.341 | the divorce | de: $\eta$ |
| So2.350 | the father | boa, boba: |
| So2.360 | the mother | ama;; ajũ: |
| So2.370 | the parents | ајũ:bวa |
| So2.380 | the married man | logiunds |
| So2.390 | the married woman | logiinde |
| So2.410 | the son | ts ${ }^{\text {cheldu; }}$, tunu |
| So2.420 | the daughter | ts ${ }^{\text {cheldi }}$, tuni:; di: |
| So2.440 | the brother | $b^{h} a i ;$ bau; ate |
| So2.444 | the older brother | bodo bhai; bodo bau; bodo ate |
| So2.445 | the younger brother | $b^{\text {a ai; loudo bau }}$ |
| So2.450 | the sister | boen; dai |
| So2.454 | the older sister | bodi boen; bodi dai |
| So2.455 | the younger sister | loudi bosn; loudi dai |
| So2.456 | the sibling | baiboen |
| So2.4561 | the older sibling | bodo baiboen |
| So2.4562 | the younger sibling | loudo baiboen |
| So2.458 | the twins | dzolay |
| So2.460 | the grandfather | tete |
| So2.461 | the old man | sja:ns manuf |
| So2.470 | the grandmother | api: |
| So2.471 | the old woman | budi (de:n); sja:ni de:n |
| So2.4711 | the grandparents | api:tste |
| So2.480 | the grandson | kanaldu |
| So2.490 | the granddaughter | kanaldi |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| So2.510 | the uncle | bapu (paternal); mıma: (maternal) |
| So2.511 | the mother's brother | тлта: |
| So2.512 | the father's brother | bари |
| So2.520 | the aunt | loudi ãju:; loudi ama: (younger than mother/father) |
| So2.521 | the mother's sister | loudi ãju;: loudi ama: (younger than mother/father) |
| So2.522 | the father's sister | nane: |
| So2.530 | the nephew | $b^{h}$ andza: (maternal); baupurs kutu (paternal); (baurs) ts ${ }^{h}$ हldu (paternal) |
| So2.540 | the niece | $b^{h}$ andzi: (maternal); (baurs) kuti ${ }^{49}$ (paternal) |
| So2.550 | the cousin | bai ( F$) ; \operatorname{bau}(\mathrm{M})$ |
| So2.560 | the ancestors | a:glo; purkhe |
| So2.570 | the descendants | $k^{\text {hande; kul; puft }}$ |
| So2.610 | the father-in-law (of a man) | foro |
| So2.611 | the father-in-law (of a woman) | foro |
| So2.620 | the mother-in-law (of a man) | fofai |
| So2.621 | the mother-in-law (of a woman) | fofai |
| So2.6220 | the parents-in-law | forofofai |
| So2.630 | the son-in-law (of a man) | dzoŋgai |
| So2.631 | the son-in-law (of a woman) | dzongai |
| So2.640 | the daughter-in-law (of a man) | boari |
| So2.641 | the daughter-in-law (of a woman) | boari |
| So2.710 | the stepfather | bi:ba:p |
| So2.720 | the stepmother | bi:ajũ: |
| So2.730 | the stepson | bi:ts ${ }^{\text {cld }}$ ldu |
| So2.740 | the stepdaughter | bi:di: |
| So2.750 | the orphan | fokray |

49 kuti is used to refer lovingly to a female who is younger than the speaker.
(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| So2.760 | the widow | randoli ${ }^{50}$ |
| So2.770 | the widower | randolo |
| So2.810 | the relatives | peredzore |
| So2.820 | the family | pere |
| So2.910 | I | hãu |
| So2.920 | you (singular) | tu |
| So2.930 | he/she/it | (ho)so |
| So2.940 | we | ta:msri[1 PLI];a:mori [1 PLE] |
| So2.941 | we (inclusive) | ta:mori |
| So2.942 | we (exclusive) | a:mori |
| So2.950 | you (plural) | toms:ri |
| So2.960 | they | honori, (ho)tznori, tinori |
| So3.110 | the animal | nэr; $p \supset \int u$; k $\varepsilon$ 'male animal' |
| So3. 150 | the livestock | fa:lay |
| So3.160 | the pasture | pa:bo;panuy |
| So3.180 | the herdsman | pa:les |
| So3.190 | the stable or stall | $k^{h} u: r$ |
| So3.220 | the ox | da:mo; bolad |
| So3.230 | the cow | gas |
| So3.240 | the calf | bats ${ }^{\text {hro }}$ |
| So3.250 | the sheep | bere |
| So3.260 | the ram | gablu |
| So3.280 | the ewe | be:ri |
| So3.290 | the lamb | gabli (F); $k^{\text {ha }}$ : ${ }^{\text {( }}$ (M) |
| So3.320 | the boar | suygar |
| So3.340 | the sow | supgari |
| So3.350 | the pig | supgar |
| So3.360 | the goat | bakri 'she-goat' |
| So3.370 | the he-goat | bakro |
| So3.380 | the kid | tseltu |
| So3.410 | the horse | gorr |
| So3.420 | the stallion | gors |

50 The base in 'widow' and 'widower' is the same as in Kinnauri, but notice that while Kinnauri Pahari uses $-i /-o$, the feminine/masculine marker, Kinnauri does not have these gender markers. Instead the adaptive morphemes occur in Kinnauri. (Cf. Chapter 2.).
(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| So3.440 | the mare | gori |
| So3.450 | the foal or colt | $t^{\text {huruts }}$ |
| So3.460 | the donkey | $p^{\text {hots }}$ |
| So3.470 | the mule | $k^{h} 3$ tsor |
| So3.520 | the cock/rooster | pofo $\mathrm{kuk}^{h}(\mathrm{a}$ )ri |
| So3.540 | the hen | bi:dz kuk ${ }^{\text {h }}$ (a)ri |
| So3.550 | the chicken | $k u k^{h}(a) r i$ |
| So3.570 | the duck | tijarss |
| So3.580 | the nest | va: |
| So3.581 | the bird | tsork ${ }^{\text {h }}$ i |
| So3.584 | the eagle | gold |
| So3.585 | the hawk | la:npja |
| So3.586 | the vulture | gold |
| So3.591 | the bat | rait hando tork $^{\text {hi }}$ |
| So3.593 | the crow | kas |
| So3.594 | the dove | gukti; kõjã |
| So3.596 | the owl | duddu |
| So3.610 | the dog | kukur |
| So3.614 | the rabbit | $k^{\text {hargof, }} k^{\text {hargos }}$ |
| So3.620 | the cat | birali; pifis |
| So3.630 | the mouse or rat | mufo |
| So3.650 | the fish | mats ${ }^{\text {i }}$ |
| So3.652 | the fin | matshirs pã:kh |
| So3.653 | the scale | mats ${ }^{\text {irs }}$ harko |
| So3.720 | the lion | braig; si: |
| So3.730 | the bear | rick ${ }^{\text {h }}$ |
| So3.740 | the fox | lomdi ; $; \varepsilon$ lti |
| So3.750 | the deer | $p^{h} O$ |
| So3.760 | the monkey | bandar |
| So3.770 | the elephant | hathi |
| So3.780 | the camel | ü:th |
| So3.810 | the insect | kirs 'insect; worm' |
| So3.811 | the head louse | mutkanro dsũe |
| So3.8112 | the body louse | de:rodzũe |
| So3.812 | the nit | $l i k^{h} \varepsilon$ |
| So3.813 | the flea | upa: |

(cont.)
Id Gloss $\quad$ Kinnauri Pahari

| So3.815 | the scorpion | soko |
| :---: | :---: | :---: |
| So3.816 | the cockroach | ferguli |
| So3.817 | the ant | tiute |
| So3.818 | the spider | botokts, botok |
| So3.819 | the spider web | botoktsro la:lo |
| So3.820 | the bee | moro makhi |
| So3.821 | the beeswax | sith ${ }^{\text {h }}$ |
| So3.822 | the beehive | bongarri |
| So3.823 | the wasp | reygel |
| So3.830 | the fly | mak ${ }^{\text {h }}$ |
| So3.832 | the mosquito | tshatse |
| So3.8340 | the termites | durairo kirs |
| So3.8350 | the tick | sorus |
| So3.840 | the worm | ki:re 'insect; worm' |
| So3.850 | the snake | saip |
| So3.8690 | the squirrel | njulits |
| So3.9170 | the buffalo | poŋ刀 be:s; pofo mosf |
| So3.920 | the butterfly | fupja:ts |
| So3.930 | the grasshopper | brents |
| So3.940 | the snail | fitna:lin |
| So3.950 | the frog | mitku |
| So3.960 | the lizard | ts ${ }^{\text {¢ }}$ mar |
| So4.110 | the body | de: |
| So4.120 | the skin or hide | $k^{\text {a altsu }}$ |
| So4.130 | the flesh | masay 'flesh; meat' |
| So4.140 | the hair | ba:l |
| So4. 142 | the beard | dari |
| So4.144 | the body hair | de:rs bail |
| So4. 146 | the dandruff | $k^{h} 3 d u$ |
| So4.150 | the blood | polats |
| So4.151 | the vein or artery | sisr |
| So4.160 | the bone | harko |
| So4.162 | the rib | pajfurirs harko |
| So4.170 | the horn | fìg |
| So4.180 | the tail | pundzar |
| So4.190 | the back | pi: $t^{h}$ |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| So4.191 | the spine | pi:thro harko, pi:tharko |
| So4.200 | the head | mutkan |
| So4.203 | the brain | me:dzu |
| So4.204 | the face | mũ:; $m u k^{h}$ |
| So4.205 | the forehead | nira:l |
| So4.207 | the jaw | henti |
| So4.208 | the cheek | pijtso |
| So4.209 | the chin | thnti |
| So4.210 | the eye | $a k^{h} i$ |
| So4.212 | the eyebrow | mikpu:; mispu: |
| So4.214 | the eyelash | mikpu: |
| So4.215 | to blink | dsipka:no |
| So4.220 | the ear | ka:n; kandzilay 'the inside of the ear' |
| So4.222 | the earwax | ka:nk ${ }^{\text {a }}$ |
| So4.230 | the nose | na:k |
| So4.231 | the nostril | na:krs duji |
| So4.232 | the nasal mucus | Sitay |
| So4.240 | the mouth | $k^{h} a: k$ |
| So4.241 | the beak | föd |
| So4.250 | the lip | $\tilde{o}^{\text {t }}{ }^{h}$ |
| So4.260 | the tongue | dzi:b |
| So4.270 | the tooth | dã:t |
| So4.271 | the gums | tiltso |
| So4.272 | the molar tooth | kongar |
| So4.280 | the neck | kja:ro |
| So4.290 | the throat | Jayo |
| So4.300 | the shoulder | bid |
| So4.301 | the shoulderblade | kamars harko |
| So4.302 | the collarbone | kreklirs harko |
| So4.310 | the arm | bai |
| So4.312 | the armpit | ksspat |
| So4.320 | the elbow | krõtsu |
| So4.321 | the wrist | $t s^{h}{ }^{\text {k }}$ tso |
| So4.330 | the hand | ha:t ${ }^{\text {h }}$ |
| So4.331 | the palm of the hand | hastantso |
| So4.340 | the finger | $\tilde{a} u \chi^{h}{ }_{i}$ |

(cont.)
Id Gloss Kinnauri Pahari

| So4.342 | the thumb | moto $\tilde{a} u{ }^{\text {t }}{ }^{i}$ |
| :---: | :---: | :---: |
| So4.344 | the fingernail | nof |
| So4.345 | the claw | pifirs nof |
| So4.350 | the leg | $k^{h} u n d i$ |
| So4.351 | the thigh | gult ${ }^{\text {i }}$ |
| So4.352 | the calf of the leg | forgar |
| So4.360 | the knee | dzanu |
| So4.370 | the foot | $k^{h} u n d i$ |
| So4.372 | the heel | $t^{\text {h }}$ ygol |
| So4.374 | the footprint | $k^{h}$ undirs mod |
| So4.380 | the toe |  |
| So4.392 | the wing | pã:k ${ }^{\text {h }}$ |
| So4.393 | the feather | pu: |
| So4.400 | the chest | tuktso |
| So4.410 | the breast | nuni: |
| So4.412 | the nipple or teat | nunirs mutkan |
| So4.430 | the navel | nã:i, nãiŋts |
| So4.4310 | the belly | pe:t 'belly; stomach' |
| So4.440 | the heart | dziva |
| So4.441 | the lung | boif |
| So4.450 | the liver | kaldzo |
| So4.451 | the kidney | patrab |
| So4.452 | the spleen | ain |
| So4.461 | the intestines or guts | áads |
| So4.462 | the waist | te:r |
| So4.463 | the hip | $k^{\text {hatants }}$ |
| So4.464 | the buttocks | gult ${ }^{\text {i }}$ i |
| So4.490 | the testicles | potok |
| So4.492 | the penis | kotol |
| So4.4930 | the vagina | $p^{h}$ ¢fl |
| So4.4940 | the vulva | $p^{h} \mathrm{St}$ ¢ |
| So4.510 | to breathe | sa:s giifno |
| So4.520 | to yawn | hajkam tfajns |
| So4.521 | to hiccough | gal tajno |
| So4.530 | to cough | $k^{\text {hupgno }}$ |
| So4.540 | to sneeze | $t{ }^{\text {h }}$ knn |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| So4.550 | to perspire | dusti: ikilno |
| So4.560 | to spit |  |
| So4.570 | to vomit | poltja:no |
| So4.580 | to bite | toyma:no |
| So4.590 | to lick | tsa:tno |
| So4.591 | to dribble | la:lo tsharjins |
| So4.610 | to sleep | sutno |
| So4.612 | to snore | $k^{\text {hongno }}$ |
| So4.620 | to dream | svine ats $^{\text {hno }}$ |
| So4.630 | to wake up | ucki:ns |
| So4.650 | to piss | mu:tharns |
| So4.660 | to shit | gutharns |
| So4.680 | to shiver | $k^{h} a s u r a y ~ l j a: n o ~$ |
| So4.690 | to bathe | dojns |
| So4.720 | to be born | dzormono |
| So4.730 | pregnant | pits ${ }^{\text {ãazenla }}$ |
| So4.740 | to be alive | dzuinds $p^{n}$ irns |
| So4.7410 | the life | dzindagi |
| So4.750 | to die | morno |
| So4.7501 | dead | morinds |
| So4.751 | to drown | qu:bno |
| So4.760 | to kill | marns |
| So4.770 | the corpse | morundo manuf |
| So4.7710 | the carcass | morundo nor |
| So4.780 | to bury | $k^{h}$ a:rke bedzno; $k^{h}$ arrke dabaija:n |
| So4.810 | strong | takra: |
| So4.820 | weak | kamdzor |
| So4.830 | healthy | bolo 'healthy; good' |
| So4.840 | sick/ill | bjardz |
| So4.841 | the fever | tas |
| So4.843 | the cold | $t^{\text {handi }}$ |
| So4.8440 | the disease | bjardz |
| So4.850 | the wound or sore | pa:r |
| So4.853 | the swelling | gut |
| So4. 854 | the itch | $k^{h} 3 \mathrm{rdz}$ |
| So4.8541 | to scratch | $k^{h}$ orotsno |

(cont.)
Id Gloss Kinnauri Pahari

| So4. 855 | the blister | tshailu |
| :---: | :---: | :---: |
| So4.857 | the pus | pu:p |
| So4.858 | the scar | pair; nafain |
| So4.860 | to cure | ila:dz karns |
| So4.870 | the physician | daktar |
| So4.880 | the medicine | sfti |
| So4.890 | the poison | bi: $\int$ |
| So4.910 | tired | fandui |
| So4.912 | to rest | $b \varepsilon \int t^{h} a k n o$ |
| So4.920 | lazy | sust |
| So4.930 | bald | pitaklo |
| So4.940 | lame | adraygi; layro |
| So4.950 | deaf | toldo |
| So4.960 | mute | lasto |
| So4.970 | blind | ka:ns 'blind; one-eyed' |
| So4.980 | drunk | dzjutdosja |
| So4.990 | naked | salgi: |
| So5.110 | to eat | $k^{h} a: n \bigcirc$ |
| So5.123 | ripe | patsunds |
| So5.124 | unripe | ai kaits, napatsunds |
| So5.125 | rotten | ki:dzi; ki:dzunds |
| So5.130 | to drink | dzutno |
| So5.140 | to be hungry | bok ${ }^{\text {h }} t^{h}$ akno |
| So5.141 | the famine | ka:l |
| So5.150 | to be thirsty | tcifuns |
| So5.16o | to suck | tsupli pi:ns; tfu:fno |
| So5.181 | to swallow | gutno |
| So5.190 | to choke | fa:ys gutno |
| So5.210 | to cook | $k^{h}$ au dzurja:ns; tfanns |
| So5.220 | to boil | ubla:ns |
| So5.230 | to roast or fry | tains |
| So5.240 | to bake | po:ns |
| So5.250 | the oven | kũqo |
| So5.260 | the pot | bandru |
| So5.270 | the kettle | timril |
| So5.28o | the pan | $p^{h}$ raijpen |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| So5.310 | the dish | parait |
| So5.320 | the plate | $t^{\text {ha }}$ :li |
| So5.330 | the bowl | tsenay; dzvy batits |
| So5.340 | the jug/pitcher | djag; lotris |
| So5.350 | the cup | $k>p$ |
| So5.370 | the spoon | timatf |
| So5.380 | the knife(1) | tsa:ku; thuri |
| So5.391 | the tongs | palars |
| So5.410 | the meal | $k^{h} a u$ |
| So5.420 | the breakfast | $d t^{h} i r o k^{h} a u$ |
| So5.430 | the lunch | arbal |
| So5.440 | the dinner | bja:llo $\mathrm{k}^{\text {hau }}$ |
| So5.460 | to peel | $k^{h} 3 l t s n o ~(T R) ; k^{h} 31 t \mathrm{l}$ :no (INTR) |
| So5.470 | to sieve or to strain | tsailno |
| So5.480 | to scrape | $k^{h} 0$ orno |
| So5.490 | to stir or to mix | ra:lnว; mifja:lns |
| So5.510 | the bread | roti |
| So5.530 | the dough | pintu |
| So5.540 | to knead | mu:tfin |
| So5.550 | the flour | tikas |
| So5.560 | to crush or to grind | pi:fno |
| So5.570 | the mill | gott |
| So5.580 | the mortar(1) | ka:ni |
| So5.590 | the pestle | musli: |
| So5.610 | the meat | masay 'flesh; meat' |
| So5.640 | the soup | $t^{\text {ha }} \mathrm{b}$ |
| So5.650 | the vegetables | fa:g |
| So5.66o | the bean | balija |
| So5.700 | the potato | alu |
| So5.710 | the fruit | $p^{\text {hol }}$ |
| So5.712 | the bunch | dzona;; bukt, bukts; pultu |
| So5.760 | the grape | dak ${ }^{\text {h }}$ |
| So5.770 | the nut | $a k^{h} u r$ 'walnut' |
| So5.790 | the oil | te:l |
| So5.791 | the grease or fat | bo |
| So5.810 | the salt | lon |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| So5.820 | the pepper | pipli: |
| So5.821 | the chili pepper | raito pipli: |
| So5.840 | the honey | mo |
| So5.850 | the sugar | tini: |
| So5.860 | the milk | $k^{h} i$ ir |
| So5. 870 | to milk | $k^{h}$ ir dono |
| So5.880 | the cheese | kokpoli |
| So5.890 | the butter | gju: 'ghee, clarified butter' |
| So5.910 | the mead | moro su:r |
| So5.940 | the fermented drink | rak; su:r; tip ${ }^{\text {ha: surr 'a local fermented }}$ drink' |
| So5.970 | the egg | fairay; anda: |
| So6.110 | to put on | bidi:no |
| So6.120 | the clothing or clothes | gaits ${ }^{\text {b }}$ |
| So6.130 | the tailor | sui |
| So6.210 | the cloth | gaitsh; kap $^{\text {h }}$ ra: |
| So6.220 | the wool | u:n |
| So6.240 | the cotton | su:t |
| So6.250 | the silk | silk |
| So6.270 | the felt | tfadar; $p^{h}$ วgdori; thalni: 'felt; shawl' |
| So6.280 | the fur | u:n |
| So6.290 | the leather | tsa:m |
| So6.310 | to spin | kaitno |
| So6.320 | the spindle | na:li |
| So6.330 | to weave | bunns |
| So6.340 | the loom | dzag |
| So6.350 | to sew | siuns |
| So6.360 | the needle(1) | sejon |
| So6.370 | the awl | barma |
| So6.380 | the thread | da:gə 'thread'; pit(t); rin 'a kind of weaving thread' |
| So6.390 | to dye | $t^{\text {homa:no }}$ |
| So6.430 | the coat | $t^{\text {h }} u \mathrm{ba}$ 'a kind of long coat' |
| So6.440 | the shirt | kami:dz; $k^{h}$ ilka |
| So6.450 | the collar | kalar |
| So6.480 | the trousers | sutan |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| So6.490 | the sock or stocking | gusaipts |
| So6.510 | the shoe | tsindari |
| So6.540 | the shoemaker | mutsi: |
| So6.550 | the hat or cap | $t p^{h i}$ |
| So6.570 | the belt | gatio |
| So6.58o | the glove | ha:thro gusauptso |
| So6.610 | the pocket | $k^{h}$ iso |
| So6.620 | the button | boton |
| So6.630 | the pin | pin; pintu |
| So6.710 | the ornament or adornment | tain [tram] |
| So6.720 | the jewel | tain [tra:n] |
| So6.730 | the ring | mundi |
| So6.740 | the bracelet | daglu; tjorku |
| So6.750 | the necklace | ka:ts; tondor ha:r |
| So6.760 | the bead | kont ${ }^{\text {h }}$ |
| So6.770 | the earring | kontai |
| So6.810 | the handkerchief or rag | sa:p ${ }^{\text {i }}$ |
| So6.820 | the towel | tolja: |
| So6.910 | the comb | ka:jgi |
| So6.920 | the brush | $\operatorname{bur}(u) \int$ |
| So6.921 | the plait/braid | ba:lin |
| So6.930 | the razor | redzar |
| So6.950 | the soap | samun |
| So6.96o | the mirror | afu |
| So7.110 | to live | $t^{\text {hakno }}$ |
| So7.120 | the house | gor |
| So7.130 | the hut | kutio |
| So7.140 | the tent | tambua |
| So7.150 | the yard or court | $k^{h}$ ait |
| So7.16o | the men's house | gor |
| So7.170 | the cookhouse | rasoi |
| So7.210 | the room | kımra |
| So7.220 | the door or gate | duar |
| So7.231 | the latch or door-bolt | hurat |
| So7.2320 | the padlock | fa:n; ta:l; ta:ltu |
| So7.240 | the key | ta: ${ }^{\text {a }}$ |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| So7.250 | the window | tiri |
| So7.26o | the floor | pã:d |
| So7.270 | the wall | divarr; bi:t |
| So7.310 | the fireplace | kundo |
| So7.320 | the stove | kundo |
| So7.330 | the chimney | dusray |
| So7.370 | the ladder | firi |
| So7.420 | the bed | kuth ${ }^{\text {an; }}$ uth ${ }^{\text {an; tarpai }}$ 'bed; cot' |
| So7.421 | the pillow | firain |
| So7.422 | the blanket | $p^{h}$ 3gdori |
| So7.430 | the chair | kursi |
| So7.440 | the table | $m e d z$ |
| So7.450 | the lamp or torch | $b s t r r^{51}$ 'flashlight' |
| So7.460 | the candle | mumbatti |
| So7.470 | the shelf | almari ${ }^{\text {haina: }}$ |
| So7.480 | the trough | tsoriy |
| So7.510 | the roof | fol; multhay |
| So7.520 | the thatch | ma:tirs lepni |
| So7.530 | the ridgepole | kurnip |
| So7.550 | the beam | boran |
| So7.560 | the post or pole | $k^{\text {hambas }}$ |
| So7.570 | the board | $p^{h}$ nnti |
| So7.610 | the mason | mistri |
| So7.620 | the brick | ì: |
| So7.630 | the mortar (2) | masa:la |
| So7.6700 | to $\tan$ | dapgja:jns |
| So8.110 | the farmer | dzim(i)darr, dzam(i)da:r |
| So8.120 | the field | do $k^{\text {hro }}$ 'field; farm' |
| So8.1210 | the paddy | da:n |
| So8.130 | the garden | bagitsa: |
| So8.150 | to cultivate | dok ${ }^{\text {rro }} k^{h}$ 万tno |
| So8.16o | the fence | bairlja:no |
| So8.170 | the ditch | ku:l |

51 From English battery.
(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| So8.210 | to plough/plow | ha:lba:no |
| So8.212 | the furrow | siit |
| So8.220 | to dig | kotns |
| So8.230 | the spade | $p^{h}$ brua |
| So8.240 | the shovel | biltsa:; kurpa:nu 'wooden snow shovel' |
| So8.250 | the hoe | kutits |
| So8.270 | the rake | dza:m |
| So8.280o | the digging stick (=yamstick) | dzabal |
| So8.310 | to sow | bo:no |
| So8.311 | the seed | bju |
| So8.320 | to mow | khor lono |
| So8.330 | the sickle or scythe | datio |
| So8.350 | the threshing-floor | pantsa:nip |
| So8.420 | the grain | nardz |
| So8.430 | the wheat | $g \varepsilon \tilde{u}$ |
| So8.440 | the barley | $d z 0$ |
| So8.470 | the maize/corn | tshalija |
| So8.48o | the rice | kaoni; tsa:val |
| So8.510 | the grass | $k^{h} 3 r$ |
| So8.520 | the hay | fukno |
| So8.530 | the plant | podar; solts |
| So8.531 | to plant | tuŋma:ns |
| So8.540 | the root | dzi:l |
| So8.550 | the branch | da:l, da:li |
| So8.56o | the leaf | paitf [pa:tr] |
| So8.570 | the flower | $p^{\text {hul }}$ |
| So8.6oo | the tree | bot |
| So8.68o | the tobacco | toma:ku, tama:ku |
| So8.690 | to smoke | sigre:ṫ djutno |
| So8.691 | the pipe | nolka |
| So8.720 | the tree stump | doja |
| So8.730 | the tree trunk | dэŋа |
| So8.740 | the forked branch | bargja |
| So8.750 | the bark | $t s^{h} a: l$ |
| So8.820 | the coconut | gori |
| So8.840 | the banana | kela |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| So8.931 | the pumpkin or squash | $r \varepsilon t^{h}{ }_{0}$ |
| So8.941 | the sugar cane | ganna |
| So8.980 | the mushroom | dsaŋmu (inedible, wild); $k^{h} \jmath t \jmath k$ (a large wild black edible mushroom) |
| So8.9930 | the needle(2) | $p \bigcirc$ |
| So8.996o | the cone | toylo |
| So8.99901 | the almond | bada:m |
| So8.99905 | the apple | seo |
| So8.99910 | the carrot | ga:djer |
| So8.99911 | the cashew | ka:dzu |
| So8.99918 | the dung | gobar |
| So8.99935 | the onion | peadz |
| So8.99937 | the pea | matar |
| Sog. 110 | to do | korno |
| Sog.1110 | to make | dzurja:ns |
| Sog. 120 | the work | ka:m |
| Sog. 140 | to bend | khayma:ns |
| Sog. 150 | to fold | kuluyma:ns |
| Sog. 160 | to tie | banno |
| Sog. 161 | to untie | $p^{\text {hutsains }}$ |
| Sog. 180 | the chain | fainli |
| Sog. 190 | the rope | bolto |
| Sog. 192 | the knot | gando |
| Sog. 210 | to strike or hit or beat | tuyma:ns |
| Sog. 211 | to pound | tukra tukra dzurja:ns |
| Sog. 220 | to cut | ka:tno |
| Sog. 221 | to cut down | ka:ti bedzno |
| Sog. 222 | to chop | $p^{\text {hairno }}$ |
| Sog. 223 | to stab | leja:nı |
| Sog. 240 | the scissors or shears | katu |
| Sog. 250 | the axe/ax | lasta |
| Sog. 251 | the adze | bais |
| Sog. 260 | to break | banns |
| Sog. 261 | broken | banundo |
| Sog. 270 | to split | pra:ma:no |
| Sog.280 | to tear | $p^{\text {hairno }}$ |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| Sog. 290 | to skin | $k^{h}{ }^{\text {il }}$ Jajijino |
| So9.310 | to rub | guldins |
| So9.3110 | to wipe | ku:/no |
| So9.320 | to stretch | tsonma:no |
| So9.330 | to pull | gi:fno |
| So9.340 | to spread out | praima:ns |
| So9.341 | to hang up | dzontay bedzno |
| So9.342 | to press | sethja:ns |
| So9.343 | to squeeze | tuma:ns |
| So9.360 | to wash | do:no |
| So9.370 | to sweep | faklja:no |
| So9.380 | the broom | gu: $\int$ |
| So9.422 | the tool | jodzay |
| So9.430 | the carpenter | mistri; ba:di 'carpenter; blacksmith'; arss (a social group traditionally employed as carpenters) |
| So9.440 | to build | tuns |
| So9.460 | to bore | $p^{h} u t \bigcirc$ garns |
| Sog.461 | to hollow out | $p^{\text {huto gairns }}$ |
| So9.480 | the saw | hasri |
| So9.490 | the hammer | hathoda: |
| So9.500 | the nail | ki:l |
| So9.56o | the glue | $1 \varepsilon t i$ |
| So9.6oo | the blacksmith | ba:di 'carpenter; blacksmith' |
| So9.640 | the gold | su:no |
| Sog.650 | the silver | rups; tsandi |
| So9.660 | the copper | trams |
| So9.670 | the iron | 10 |
| Sog.680 | the lead | si:k ${ }^{h}$ |
| So9.730 | the clay | $m a t(t) i$ |
| So9.740 | the glass | fifa |
| So9.760 | the basket | ḑera;; jarai; tsanar; tsayg (e)ri |
| So9.770 | the mat | $k^{\text {hertso; }}$ pıf |
| So9.771 | the rug | $u t^{\text {han }}$ |
| Sog.810 | to carve | tuma:ns |
| So9.830 | the statue | murti |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| Sog. 840 | the chisel | ja:n |
| Sog.880 | the paint | rayg |
| Sog.890 | to paint | raygja:no |
| So9.9000 | to draw water | timains |
| So9.9100 | the peg | $k^{h} u n t i$ |
| S10.110 | to move | sika:no |
| S10.120 | to turn | fu:rins |
| S10.130 | to turn around | $p^{\text {hindra furrims }}$ |
| S10.140 | to wrap | banno |
| S10.150 | to roll | thrrije bedzno |
| S10.160 | to drop | fara:no |
| S10.170 | to twist | m\&freja:ns |
| S10.210 | to rise | tsilkans |
| S10.220 | to raise or lift | tsungns |
| S10.240 | to drip | ikilno |
| S10.250 | to throw | $p^{\text {hikja:ns }}$ |
| S10.252 | to catch | paino |
| S10.260 | to shake | sikamo |
| S10.320 | to flow | bojejins |
| S10.330 | to sink | du:bno |
| S10.352 | to splash | ts ${ }^{\text {atgigains }}$ |
| S10.370 | to fly | udija:no |
| S10.380 | to blow | bagur lagno |
| S10.410 | to crawl | gi:fins |
| S10.413 | to crouch | tsumns |
| S10.420 | to slide or slip | $p^{\text {ºj fing }}$ |
| S10.430 | to jump | la:y tshara:ns |
| S10.431 | to kick | latte leja:no |
| S10.440 | to dance | natsno |
| S10.450 | to walk | handno |
| S10.451 | to limp | larrejino |
| S10.460 | to run | $t^{\text {hu }}$ :rno 'to run; to flee' |
| S10.470 | to go | nafno |
| S10.471 | to go up | agafnafno |
| S10.472 | to climb | bo:te nafno |
| S10.473 | to go down | to:l nafno |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| S10.474 | to go out | baije nafno |
| S10.480 | to come | $a t^{h} n$ |
| S10.481 | to come back | vaipis atshno |
| S10.490 | to leave | fothja:no |
| S10.491 | to disappear | hirajiins |
| S10.510 | to flee | $t^{\text {huirno }}$ 'to run; to flee' |
| S10.520 | to follow | pitshã: atsho |
| S10.550 | to arrive | poits ${ }^{\text {n }}$ ¢ |
| S10.560 | to approach | poitshn |
| S10.570 | to enter | bite nafno |
| S10.610 | to carry | tsungno |
| S10.612 | to carry in hand | ha:thke tsungns |
| S10.613 | to carry on shoulder | kamargaif tsupgno |
| S10.614 | to carry on head | mutangaiftsungno |
| S10.615 | to carry under the arm | bajpat tsupgno |
| S10.620 | to bring | anno |
| S10.630 | to send | bedzno; tsharja:no |
| S10.640 | to lead | ba:t dik ${ }^{\text {ha:no }}$ |
| S10.650 | to drive | tsalaino |
| S10.660 | to ride | thok faijno |
| S10.670 | to push | tuyma:ns |
| S10.710 | the road | solok ( ${ }^{h}$ ) |
| S10.720 | the path | bait |
| S10.740 | the bridge | ge:f; ts ${ }^{\text {ham }}$ |
| S10.760 | the wheel | paija |
| S10.780 | the yoke | grolduy; kol |
| S10.810 | the ship | pa:niro dza:dz (any kind of naval vehicle) |
| S10.910 | the port | bandarga |
| S10.920 | to land | uturns 'to land; to descend' |
| S11.110 | to have | $p^{\text {hirns }}$ 'to have; to become' |
| S11.120 | to own | apro dzurja:no |
| S11.130 | to take | maygns 'to take; to request' |
| S11.140 | to grasp | pains |
| S11.150 | to hold | pa:n |
| S11.160 | to get | paja:no |
| S11.170 | to keep | dsagns |

(cont.)
Id Gloss Kinnauri Pahari

| S11.180 | the thing | tcidz |
| :---: | :---: | :---: |
| S11.210 | to give | denno |
| S11.220 | to give back | va:pis denno |
| S11.240 | to preserve | sambaile dzagno |
| S11.250 | to rescue | botsa:no |
| S11.270 | to destroy | barba:d korns |
| S11.280 | to injure | duk ${ }^{\text {aino }}$ |
| S11.2900 | to damage | naksa:n pots ${ }^{\text {ains }}$ |
| S11.310 | to look for | la:fains |
| S11.320 | to find | paja:no; porns |
| S11.330 | to lose | hiramo (nvol) |
| S11.340 | to let go | nafno bedzno |
| S11.430 | the money | rupja |
| S11.440 | the coin | pesa |
| S11.510 | rich | amir; sahuka:r |
| S11.520 | poor | da:ldis; gari:b |
| S11.530 | the beggar | maygta |
| S11.540 | stingy | kandzu:s |
| S11.620 | to borrow | (udarr) mangno |
| S11.630 | to owe | rim katgja:ns |
| S11.640 | the debt | rim |
| S11.650 | to pay | denno |
| S11.660 | the bill | bil |
| S11.690 | the tax | teks |
| S11.770 | to hire |  |
| S11.780 | the wages | kamajii |
| S11.790 | to earn | kamaja:no |
| S11.810 | to buy | lojins |
| S11.820 | to sell | bikinno |
| S11.830 | to trade or barter | kolma:no |
| S11.840 | the merchant | dukandarr |
| S11.850 | the market | badza:r |
| S11.860 | the shop/store | duka:n |
| S11.870 | the price | kismat |
| S11.880 | expensive | menga |
| S11.890 | cheap | sosta |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| S11.910 | to share | bantenno |
| S11.920 | to weigh | tolja:no |
| S12.0100 | after | pits ${ }^{h} u$ (temporal; spatial) |
| S12.0110 | behind | pits ${ }^{\text {ha }}$ : e |
| S12.0120 | in | bite |
| S12.0130 | at | ke |
| S12.0200 | beside | la:va: |
| S12.0300 | down | to:l |
| S12.0400 | before | $a u k^{h} a$ |
| S12.0410 | in front of | aŋmaj |
| S12.0500 | inside | bite (direction) |
| S12.0600 | outside | ba:j (direction) |
| S12.0700 | under | toil; pat; srandi, ondi 'below' |
| S12.0800 | up | agaf |
| S12.0810 | above | agaf; undsi |
| S12.110 | the place | dzaiga: |
| S12.120 | to put | dzagno |
| S12.130 | to sit | befno |
| S12.140 | to lie down | titts $^{h}$ n najno |
| S12.150 | to stand | udzi:ns |
| S12.160 | to remain | $t^{\text {thakno }}$ |
| S12.170 | the remains | $t^{\text {hakunds }}$ |
| S12.210 | to gather | djargja:no |
| S12.213 | to pile up | dzar bedzno |
| S12.220 | to join | dzodgja:no |
| S12.230 | to separate | $k^{\text {haimains }}$ |
| S12.232 | to divide | bantno |
| S12.240 | to open | $k^{h} u l \varepsilon j a: n \frac{}{}$ |
| S12.250 | to shut | budno |
| S12.260 | to cover | budno |
| S12.270 | to hide | torno |
| S12.310 | high | ufto |
| S12.320 | low | nifto |
| S12.330 | the top | mutkan |
| S12.340 | the bottom | $t^{\text {hais }}$ |
| S12.350 | the end(1) | ont |

(cont.)
Id Gloss Kinnauri Pahari

| S12.352 | pointed | tikh3 'sharp; pointed' |
| :---: | :---: | :---: |
| S12.353 | the edge | dair; bile, billa (e.g. of a mountain) |
| S12.360 | the side | kanaire |
| S12.370 | the middle | madzar, madz; maftãje |
| S12.410 | right(1) | dakhno |
| S12.420 | left | $k^{h} o d z a y, k^{h} o d z a:$ |
| S12.430 | near | ne:r |
| S12.440 | far | du:r |
| S12.450 | the east | $k^{h} o d z a y$ |
| S12.460 | the west | dak ${ }^{\text {n }}$, |
| S12.470 | the north | dzarko |
| S12.480 | the south | retko |
| S12.530 | to grow | radza:ns |
| S12.540 | to measure |  |
| S12.550 | big | bodo; sja:no 'big; older' |
| S12.560 | small | loudo 'small; younger; short' |
| S12.570 | long | la:mo |
| S12.580 | tall | $u f t ?$ |
| S12.590 | short | tsho |
| S12.610 | wide | bjuplo |
| S12.620 | narrow | gato |
| S12.630 | thick | bak ${ }^{\text {l }}$ b |
| S12.650 | thin | patlo |
| S12.670 | deep | dugo |
| S12.680 | shallow | kut ${ }^{\text {h }}$ : |
| S12.710 | flat | so |
| S12.730 | straight | soldo |
| S12.740 | crooked | \&kJopekfo |
| S12.750 | the hook | $k^{h} u n t i$ : |
| S12.760 | the corner | tokts |
| S12.770 | the cross | $b a r g(j) a$ |
| S12.780 | the square | dzirtso |
| S12.810 | round | $p^{\text {handeri }}$ |
| S12.820 | the circle | gola |
| S12.830 | the ball | gindu |
| S12.840 | the line | le:n |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| S12.850 | the hole | $p^{h} u t \bigcirc$ |
| S12.920 | similar | عkdzeno |
| S12.930 | to change | bodlja:no; kolma:no |
| S13.0000 | zero | sifar |
| S13.0100 | one | ck |
| S13.0200 | two | dui |
| S13.0300 | three | gon; tron |
| S13.0400 | four | tsar |
| S13.0500 | five | pã:ts |
| S13.0600 | six | ts ${ }^{\text {b }}$ |
| S13.0700 | seven | sait |
| S13.0800 | eight | $a t^{h}$ |
| S13.0900 | nine | пэи |
| S13.100 | ten | dof |
| S13.101 | eleven | gjara |
| S13.102 | twelve | baira |
| S13.103 | fifteen | pondra |
| S13.104 | twenty | biif, be:f; zisa |
| S13.105 | a hundred | ra; so |
| S13.106 | a thousand | hadzair |
| S13.107 | to count | gэпnง |
| S13.140 | all | scb |
| S13.150 | many | badJ, bodi; bant; muluk; va: ${ }^{52}$ |
| S13.170 | few | doŋk 'few; some'; uturi: 'few; some'; kam 'few; less' |
| S13.180 | enough | garab; kjalck ${ }^{\text {ha }}$ |
| S13.181 | some | uturri' 'few; some' |
| S13.210 | full | bori: |
| S13.220 | empty | $k^{\text {hali: }}$ |
| S13.230 | the part | hissa |
| S13.2310 | the piece | tukra |
| S13.240 | the half | ado; $k^{h}$ antsi ${ }^{53}$ |

[^85](cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| S13.330 | only | $\varepsilon k^{h}{ }^{\prime}$ |
| S13.3310 | alone | $\varepsilon k^{h} a l \varepsilon, \varepsilon k^{h} a l o$ |
| S13.340 | first | $p \mathrm{c}$ a: |
| S13.350 | last | $s \varepsilon(p)$ ka pits ${ }^{\text {ha }}$ : $(j) \varepsilon$ |
| S13.360 | second | pela:ka pits ${ }^{\text {ãa }}$ : $(j) \varepsilon$ |
| S13.370 | the pair | dsodi: |
| S13.380 | twice/two times | duibere |
| S13.440 | three times | gonbere; tronbere |
| S13.99906 | thirty | $b i j o d s \int$ |
| S14.120 | the age | umbar |
| S14.130 | new | nว̃uvõ, nวิขõ |
| S14.140 | young | dzoan |
| S14.150 | old | budo (animate); sja:no (animate) 'old; wise'; pura:no (non-animate) |
| S14.160 | early | hasal 'early, fast' |
| S14.170 | late | berui |
| S14.180 | now | ع:; im(a)ri |
| S14.210 | fast | hasal 'early; fast'; dzJdz 'quickly' |
| S14.220 | slow | me:se 'slowly' |
| S14.230 | to hurry | hasalkhtt(a)no |
| S14.240 | to be late | berimo |
| S14.250 | to begin | dufa:jins |
| S14.2510 | the beginning | dufajiinds bere |
| S14.260 | the end(2) | $k^{\text {hatam }}$ |
| S14.270 | to finish |  |
| S14.290 | ready | trar |
| S14.310 | always | dear |
| S14.320 | often | bodiba:g |
| S14.330 | sometimes | ka:duka:du |
| S14.332 | for a long time | ba:do auk ${ }^{\text {haka }}$ |
| S14.340 | never | ka:duinuã |
| S14.350 | again | $p^{\text {h }}$ iri |
| S14.410 | the day(1) | djuse |
| S14.4110 | the day(2) | djair |
| S14.420 | the night | raitf |
| S14.440 | the morning | dothi; kalt ${ }^{\text {a }}$ a:n |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| S14.450 | the midday | djuse |
| S14.451 | the afternoon | djuse |
| S14.460 | the evening | bja:l; bja:lt ${ }^{h}$ a:n (the time from sunset until it gets dark) |
| S14.470 | today | a:dz |
| S14.480 | tomorrow | ka:le |
| S14.481 | the day after tomorrow | po: $\int \downarrow$ |
| S14.490 | yesterday | hi:dz |
| S14.491 | the day before yesterday | $p^{h}$ ridz |
| S14.510 | the hour | ganta: |
| S14.530 | the clock | diva:rgadi |
| S14.610 | the week | hapta |
| S14.620 | Sunday | itvar |
| S14.630 | Monday | sumar |
| S14.640 | Tuesday | maygol |
| S14.650 | Wednesday | bud ${ }^{\text {h }}$ |
| S14.660 | Thursday | brest |
| S14.670 | Friday | fukkur |
| S14.680 | Saturday | fonfar |
| S14.710 | the month | mais |
| S14.730 | the year | borof |
| S14.740 | the winter | himad |
| S14.750 | the spring(2) | renam |
| S14.760 | the summer | bajal |
| S14.770 | the autumn/fall | ts ${ }^{\text {armis }}$ |
| S14.780 | the season | mosam |
| S 15.210 | to $\operatorname{smell}(1)$ | gã:datsho |
| S15.212 | to sniff | fingino |
| S 15.220 | to smell (2) | fingins |
| S 15.250 | fragrant | bass |
| S 15.260 | stinking | gã:d 'stinking; smell' |
| S15.310 | to taste | dsamja:no |
| S15.350 | sweet | $m i t^{\text {h }}$, |
| S 15.360 | salty | lonno |
| S15.370 | bitter | kodus |
| S15.380 | sour | amlo; $k^{h} a: t o$ |

(cont.)
Id Gloss Kinnauri Pahari

| S15.410 | to hear | Junno |
| :---: | :---: | :---: |
| S15.420 | to listen | Junno |
| S15.440 | the sound or noise | kanija: |
| S15.450 | loud | dzore |
| S 15.460 | quiet | tsutkay |
| S 15.510 | to see | dzk ${ }^{\text {a }}$ :n |
| S15.520 | to look | fa:no |
| S 15.560 | to shine | tsamakno |
| S15.570 | bright | pjã:jo; tsamukds |
| S15.610 | the colour/color | rapg |
| S15.620 | light(2) | halko |
| S15.630 | dark | aja:ro |
| S15.640 | white | fuklo |
| S15.650 | black | ka:lo |
| S15.66o | red | raits |
| S15.670 | blue | harro |
| S15.680 | green | hairo |
| S15.690 | yellow | pi:lo |
| S15.710 | to touch | ts ${ }^{\text {huygno }}$ |
| S15.712 | to pinch | tundue leja:ns |
| S 15.720 | to feel | dzanno |
| S15.740 | hard | kath |
| S15.750 | soft | kaygls 'soft; smooth' |
| S 15.760 | rough(1) | $k^{h} a f r u$ |
| S15.770 | smooth | koygls 'soft; smooth' |
| S15.780 | sharp | tik'3 'sharp; pointed' |
| S15.790 | blunt | $t^{h} u \ln u ; t^{h}$ untsu: |
| S15.810 | heavy | gorko |
| S15.820 | light(1) | halko |
| S15.830 | wet | si:ns |
| S15.840 | dry | Juko |
| S15.850 | hot | dsas; taits |
| S 15.851 | warm | taits |
| S15.860 | cold | fe:lo; thanda |
| S15.870 | clean | saip ${ }^{\text {h }}$ |
| S15.880 | dirty | mairi; doliidar 'dirty; untidy' |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| S15.890 | wrinkled | $t^{h} i \underline{t} 50$ |
| S16.110 | the soul or spirit | aitma: |
| S16.150 | surprised or astonished | bifa: di:no |
| S16.180 | the good luck | bolo baig |
| S16.190 | the bad luck | mairi baig |
| S16.230 | happy | $k^{h} u s i s s ; 弓$ ¢ |
| S16.250 | to laugh | haisno |
| S16.251 | to smile | sululutse haisno |
| S16.260 | to play | $k^{h} \operatorname{l} \ln$ |
| S16.270 | to love | dsa:flja:ns |
| S16.300 | to embrace | kja:rs paino |
| S16.310 | the pain | dsa: |
| S16.320 | the grief | duk ${ }^{\text {n; }}$ jo:p |
| S16.340 | to regret or be sorry | pattaja:no |
| S16.350 | the pity | pa:p |
| S16.370 | to cry | ru:no |
| S16.380 | the tear | misti: |
| S16.390 | to groan | $k^{\text {hroyajino }}$ |
| S16.410 | to hate | $k^{h} u r a j j i n s$ |
| S16.420 | the anger | jar; rof |
| S16.440 | the envy or jealousy | dzid |
| S16.450 | the shame | laidz |
| S16.480 | proud | finga:ray; $\int \varepsilon k^{h}{ }^{\text {i }}$ 'proud, pride' |
| S16.510 | to dare | himmot dzagno, himmat dzagno |
| S16.530 | the fear | dor |
| S16.540 | the danger | kotsro |
| S16.620 | to want | taino |
| S16.622 | to choose | $k^{h}$ Elma:no |
| S16.630 | to hope | a: fa: korno; a:fa: lejino |
| S16.650 | faithful | bolis, bolos |
| S16.660 | true | sots, sotsko |
| S16.670 | to lie(2) | alko bolno; tsinti: bolno |
| S16.680 | the deceit | dok ${ }^{\text {a }}$ : |
| S16.690 | to forgive | ts ${ }^{\text {haraija:no }}$ |
| S16.710 | good | bolo; e:sa, csa: |
| S16.720 | bad | mar |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| S16.730 | right(2) | tob |
| S16.740 | wrong | va:may 'wrong; fault' |
| S16.760 | the fault | golti; kusur; va:may |
| S16.770 | the mistake | golti, galti |
| S16.780 | the blame | $k^{\text {ho }}$ : ${ }^{\text {a }}$ |
| S16.790 | the praise | ta:rip ${ }^{\text {h }}$ |
| S16.810 | beautiful | fa:ro |
| S16.820 | ugly | majaro |
| S16.830 | greedy | la:ltsi |
| S16.840 | clever | tsala:k |
| S16.99903 | thank you! | $d^{\text {hanjava:d }}$ |
| S17.110 | the mind | dima:k |
| S17.130 | to think(1) | ronmains; suntsi:ns |
| S 17.150 | to believe | b(a)rosa: korno |
| S17.16o | to understand | ha:go manno |
| S17.170 | to know | dzanns |
| S 17.171 | to guess | $t^{\text {horg karno }}$ |
| S17.172 | to imitate | nokol korno |
| S17.180 | to seem | dzannos korno |
| S17.210 | wise | skolsja |
| S17.220 | stupid | $\operatorname{mur}(u) k^{h}$ |
| S17.230 | mad | $b\left({ }^{h}\right)$ ¢ ${ }^{\text {a }}$ |
| S17.240 | to learn | fikhi:no |
| S17.242 | to study | podno |
| S17.250 | to teach | fik ${ }^{\text {a }}$ :ns |
| S17.260 | the pupil | tsela: |
| S17.270 | the teacher | mastar, mastor, maftor, maftar |
| S17.280 | the school | sakul, sukul |
| S17.310 | to remember | ja:d dza:gno |
| S17.320 | to forget | bisrinn |
| S17.350 | obscure | furaij |
| S17.360 | secret | gupt |
| S17.410 | the intention | nijet |
| S17.430 | the doubt | fok |
| S17.441 | to betray | $t^{\text {hakaja:ns }}$ |
| S17.450 | the need or necessity | tsa:no |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| S17.460 | easy | bols 'easy; good; healthy' |
| S17.470 | difficult | ase: 'rough (e.g. road)'; beru 'with difficulty'; kathy 'hard; trouble' |
| S17.480 | to try | kJIf korno |
| S17.490 | the manner | $p^{\text {brajai }}$ |
| S17.510 | and | $a i$ |
| S17.520 | because | te: |
| S17.530 | if | ta: lekin |
| S17.540 | or | ja: |
| S17.550 | yes | ã: |
| S17.560 | no | пиа |
| S17.610 | how? | kju |
| S17.620 | how many? | kittrg, ksti |
| S17.630 | how much? | keti |
| S17.640 | what? | $k i$ |
| S17.650 | when? | ka:du; ketre |
| S17.660 | where? | kinde |
| S17.670 | which? | kindjo |
| S17.68o | who? | kun |
| S17.690 | why? | kjü: |
| S18.110 | the voice | kad |
| S18.120 | to sing | lja:no |
| S18.130 | to shout | djinja:no |
| S18.150 | to whisper | kufpuja:ns |
| S18.160 | to mumble | tJoklja:no |
| S18.170 | to whistle | fvinja:no |
| S18.180 | to shriek | tonins |
| S18.190 | to howl | kukurrs rono |
| S18.210 | to speak or talk | bataino |
| S18.211 | to stutter or stammer | $p^{\text {hapi: bata:no }}$ |
| S18.220 | to say | bolno |
| S18.221 | to tell | suna:ns |
| S18.222 | the speech | ba:jan |
| S18.230 | to be silent | tsutuk thakno |
| S18.240 | the language | kad |
| S18.260 | the word | $t$ u: |

(cont.)
Id Gloss Kinnauri Pahari

| S18.28o | the name | nao |
| :---: | :---: | :---: |
| S18.310 | to $\operatorname{ask}(1)$ | putf ${ }^{\text {( }}$ a no |
| S18.320 | to answer | dzaba:b denno |
| S18.330 | to admit | golti monja:ns, galti monja:ns |
| S18.340 | to deny | nomonja:no |
| S18.36o | to promise | dorom denns; re:n denns |
| S18.370 | to refuse | hurfennu |
| S18.380 | to forbid | foth( $\varepsilon$ )ja:no |
| S18.410 | to call(1) | arains |
| S18.430 | to announce | funa:ns |
| S18.440 | to threaten | dorains |
| S18.450 | to boast | $\int \varepsilon k^{h} i$ korns |
| S18.510 | to write | likhno; tfema:ns |
| S18.520 | to read | bantsja:ns 'to read, to study' |
| S18.56o | the paper | kagli; patray; petfa: |
| S18.570 | the pen | pen |
| S18.610 | the book | kata:b, kita:b |
| S18.710 | the flute | bãfuri: |
| S18.720 | the drum | nagairo |
| S18.730 | the horn or trumpet | fonnail |
| S19.110 | the country | muluk |
| S19.120 | the native country | sosoro mul $(u) k$ |
| S19.150 | the town | $\int \varepsilon r$ |
| S19.160 | the village | $d \varepsilon \int ; g a ̃ v$ |
| S19.170 | the boundary | si:may |
| S19.210 | the people | manu§ |
| S19.230 | the clan | pere |
| S19.240 | the chieftain | bodo; sja:no |
| S19.250 | the walking stick | beit; $t^{h}$ umma: |
| S19.310 | to rule or govern | raidz korns; raidz tsala:no |
| S19.320 | the king | raidza: |
| S19.330 | the queen | ra:ni: |
| S19.370 | the citizen | mul(u)kro manuf |
| S19.410 | the master | ma:lik |
| S19.420 | the slave | dass; gularm |
| S19.430 | the servant | nukur |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| S19.450 | to command or order | $b o l n o ~ ' t o ~ s a y ' ~$ |
| S19.460 | to obey | baitefunns |
| S19.510 | the friend | kones; dzokhja: |
| S19.520 | the enemy | dufmon, dufman |
| S19.540 | the neighbour | pa:de $\int$ |
| S19.550 | the stranger | na:bo manuf |
| S19.56o | the guest | me(h)ma:n |
| S19.5650 | to invite | ara:no |
| S19.580 | to help | madat korno |
| S19.590 | to prevent | rok ${ }^{\text {hjaino }}$ |
| S19.610 | the custom | rusum; riva:dz, rava:dz |
| S19.620 | the quarrel | masrien; paijzn 'squabble' |
| S19.650 | to meet | $b \varepsilon t^{\text {hins }}$ |
| S19.720 | the prostitute | kandzar |
| S20.110 | to fight | losi:no 'to fight; to beat' |
| S20.140 | the peace | sayna; tfe:n |
| S20.150 | the army | $p^{h}$ ¢ \% ; sena: $^{\text {a }}$ |
| S20.170 | the soldier | senik |
| S20.210 | the weapon | fastar |
| S20.220 | the club | dumma: |
| S20.222 | the battle-axe | dapro |
| S20.250 | the arrow | danuf |
| S20.270 | the sword | trovail |
| S20.280 | the gun | tupuk |
| S20.330 | the helmet | dzititns |
| S20.340 | the shield | harins |
| S20.410 | the victory | dzi:t |
| S20.420 | the defeat | ha:r |
| S20.430 | the attack | hamla |
| S20.440 | to defend | botsa:no |
| S20.471 | the guard | persdarr; sontri: |
| S20.510 | the fisherman | matshi pa:ndosja |
| S20.520 | the fishhook | kã: do 'fishhook; thorn' $^{\text {a }}$ |
| S20.610 | to hunt | airs korno |
| S20.620 | to shoot | goli tsala:no |
| S20.630 | to miss | hiraji:no |

(cont.)

| Id $\quad$ Gloss | Kinnauri Pahari |
| :--- | :--- | :--- |


| S20.640 | the trap | pa:nosja |
| :---: | :---: | :---: |
| S20.650 | to trap | pa:no |
| S21.110 | the law | kajda:; ka:nun |
| S21.150 | the court | kot |
| S21.170 | the judgment | $p^{h_{\varepsilon s} / a}$ |
| S21.180 | the judge | $d_{5}{ }^{\text {d }}$ 3 |
| S21.230 | the witness | goa; $\int a: d o t$ |
| S21.240 | to swear | kosom kha:no |
| S21.250 | the oath | fapat |
| S21.310 | to accuse | tsor dzurmaino |
| S21.370 | the penalty or punishment | sadza: |
| S21.380 | the fine | dand |
| S21.390 | the prison | $d z \varepsilon l$ |
| S21.440 | the rape | blatka:r |
| S21.460 | the arson | a:g leja:no |
| S21.510 | to steal | tor $k^{h}$ ¢ n 万 |
| S21.520 | the thief | tsor |
| S22.110 | the religion | dorom |
| S22.120 | the god | deo |
| S22.130 | the temple | kothi; saind |
| S22.150 | the sacrifice | diju:ns |
| S22.160 | to worship | pu:dzno |
| S22.170 | to pray | dontino |
| S22.180 | the priest | padza:ro |
| S22.190 | holy | tosk ${ }^{\text {h }}$ |
| S22.230 | to bless | dzar korno |
| S22.240 | to curse | tuul korns |
| S22.260 | to fast | brot korno |
| S22.310 | the heaven | sorgo |
| S22.320 | the hell | norok |
| S22.350 | the demon | rakas |
| S22.370 | the idol | murti: |
| S22.420 | the magic | dza:du(:) |
| S22.470 | the omen | fokun |
| S23.1000 | the radio | requ(:) |
| S23.1100 | the television | tivi, tibi: |

(cont.)

| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| S23.1200 | the telephone | $p^{h}$ On |
| S23.1300 | the bicycle | sajkal |
| S23.1350 | the motorcycle | motarsajkal |
| S23.1400 | the car | ka:r |
| S23.1500 | the bus | bos |
| S23.1550 | the train | rel(ga:di) |
| S23.1600 | the airplane | (havaii) dza:dz |
| S23.1700 | the electricity | bidzli |
| S23.1750 | the battery | sel |
| S23.1800 | to brake | brek lea:n |
| S23.1850 | the motor | motar |
| S23.1900 | the machine | mifin |
| S23.2000 | the hospital | aspata:l |
| S23.2100 | the nurse | nars |
| S23.2200 | the pill or tablet | sftirs goli |
| S23.2300 | the injection | sua |
| S23.2400 | the spectacles/glasses | mikhrab |
| S23.3000 | the government | gorment |
| S23.3100 | the president | raftpati |
| S23.3200 | the minister | mantri: |
| S23.3300 | the police | pulsia:, polis |
| S23.3400 | the driver's license | drajvaro lesens |
| S23.3500 | the license plate | nambar pale (j)t |
| S23.3600 | the birth certificate | dzonomno sartifikat |
| S23.3700 | the crime | dzurum |
| S23.3800 | the election | tuna:v |
| S23.3850 | the address | pota: |
| S23.3900 | the number | nambar |
| S23.3950 | the street | goli |
| S23.4000 | the post/mail | da:k ${ }^{\text {h }}$ |
| S23.4100 | the postage stamp | tikat |
| S23.4200 | the letter | tsit ${ }^{\text {hi }}$ |
| S23.4400 | the bank (financial institution) | beŋk |
| S23.5000 | the tap/faucet | $n \mathrm{olk}{ }^{h}$ a: |
| S23.5100 | the sink | tela |


| Id | Gloss | Kinnauri Pahari |
| :---: | :---: | :---: |
| S23.5200 | the toilet | $k^{h}$ usurriy |
| S23.5300 | the mattress | gadda: |
| S23.5400 | the tin/can | kanastar |
| S23.5500 | the screw | ki:l |
| S23.5550 | the screwdriver | petkas |
| S23.5600 | the bottle | botol |
| S23.5650 | the candy/sweets | mithai |
| S23.5700 | the plastic | pelasstik |
| S23.5750 | the bomb | bamb |
| S23.5800 | the workshop | (mafinro) got(t) |
| S23.5900 | the cigarette | sigre:t |
| S23.6000 | the newspaper | ak ${ }^{h}$ bair |
| S23.6100 | the calendar | kalender |
| S23.6200 | the film/movie | piktfar; ${ }^{\text {hilam }}$ |
| S23.6400 | the song | get, gi:t |
| S23.9000 | the tea | t ${ }^{\text {a }}$ |
| S23.9100 | the coffee | kJfi: |
| S24.0100 | to be | huns; $p^{\text {hirns }}$ |
| S24.0300 | without | bina |
| S24.0400 | with | si |
| S24.0600 | not | nиа |
| S24.0700 | this | hoi; jo |
| S24.0800 | that | hoso |
| S24.0900 | here | int ${ }^{\text {h }}$ ¢ |
| S24.1000 | there | hotin; ont ${ }^{\text {¢ }}$ \% tint $^{\text {h }}$ i: 'from there' |
| S24.1100 | other | ajk ${ }^{\text {h }}$ |
| S24.1200 | next | ajk ${ }^{\text {h }}$ |
| S24.1300 | same | rukfä(j)i |
| S24.1400 | nothing | kitse nua |
| S24.99910 | someone | kunta |
| S24.99912 | then | $t \varepsilon:$ |

# Linguistic Relationships in Kinnaur I: Sino-Tibetan 

## 1 Introduction

There has been a general lack of systematic, comparative linguistic studies of the Sino-Tibetan language varieties of Kinnaur (referred to as "KST varieties" in this book). Some comparative data are found in older works (e.g. Gerard 1842; Cunningham 1844; Bailey 1909). More recent works on the languages of this region (e.g., Neethivanan 1976; D.D. Sharma 1988; Saxena 1992, 1995b, 1997b, 2002, 2007, 2017; Takahashi 2001, 2007, 2012; Negi and Negi 2015; Negi 2017) have generally focused their attention on the linguistic analysis of one specific KST variety, the speech of Lower Kinnaur (Sangla, Pangi, Kalpa), the main exceptions being some work on Chhitkuli (Martinez 2019, 2021), and on the Middle Kinnaur variety Shumcho (Huber 2007, 2014a, 2014b) and a very brief "language snapshot" (descriptions of genealogy and sociolinguistic status) of Sunam by Negi (2020). Consequently, we have had no good grounds for examining how the various KST varieties relate to one another. The closest thing to such a study that I am aware of are the sociolinguistic surveys by Webster (1991) and Chamberlain et al. (1998).

This chapter presents such an investigation based on data collected in a questionnaire-based study carried out in Kinnaur. The KST varieties examined here represent the speech of nine villages located in different parts of Kinnaur. The results of the study are then compared with existing accounts of SinoTibetan languages in Kinnaur and their classification.

Summarizing briefly the results that are presented in detail below, the investigated KST varieties can be classified into three (or possibly four) groups, where the KST varieties spoken in Sangla, Nichar, Ropa and Kalpa (referred to below as the Sangla group or Kinnauri; see Chapter 2) form one externally distinct and internally cohesive group. The KST varieties spoken in Poo, Kuno and Nako (referred to as the Nako group or Navakat; see Chapter 3) form another clear grouping. The KST varieties of Chitkul and Labrang fall somewhere in between, where Chitkul and/or Labrang are more similar to one or the other group concerning some linguistic features, but with regard to other linguistic features Chitkul and/or Labrang behave distinctly from both Kinnauri and Navakat. At the same time, Chitkul and Labrang are not close enough to each other that we could say that they jointly make up a third grouping.


FIGURE 15 Location of the villages in Kinnaur for which data was collected robinson projection. map design: ljuba veselinova

Data was collected representing the speech of the following villages in Kinnaur: Nichar, Sangla, Chitkul, Kalpa, Kuno, Labrang, Poo, Ropa and Nako (shown on the map in Figure 15). ${ }^{1}$ The main motivation for selecting the speech of these villages was to include a representative range of language data from as diverse geographical regions as possible. Table 36 contains basic information on these villages. In general, Kinnaur is multilingual (see Chapter 1), and in several places, different traditional social groups in a village are known to use separate languages (Huber 2014b: 194f.). In such cases, the KST variety discussed here reflects the speech of the majority group in that village. For the purposes of the study presented in this chapter the investigated KST varieties will consistently be referred to by the names of the villages where the corresponding KST varieties are spoken: for example, "Sangla" rather than "(Sangla) Kinnauri" and "Nako" rather than "Navakat" or "Bhoti Kinnauri".

Since the comparison of the KST varieties will be based primarily on a lexicostatistical investigation of basic vocabulary, the longer version of the

[^86]| Village (tahsil; coordinates) | Some information about the village |
| :--- | :--- |
| Chitkul (Sangla; $\left.31^{\circ} 21^{\prime} \mathrm{N}, 78^{\circ} 26^{\prime} \mathrm{E}\right)$ | Located in Sangla valley on the right bank of the <br> Baspa river. It is the highest village in the Sangla <br> valley (3,450 m). |
| Sangla (Sangla; $\left.31^{\circ} 25^{\prime} \mathrm{N}, 78^{\circ} 15^{\prime} \mathrm{E}\right)$ | Located in Sangla valley on the right bank of the |
|  | Baspa river. |
| Kalpa (Kalpa; $\left.31^{\circ} 32^{\prime} \mathrm{N}, 78^{\circ} 15^{\prime} \mathrm{E}\right)$ | Located in Satluj valley. The Kalpa village was |
|  | earlier the district capital of Kinnaur. |
| Nichar (Nichar; $\left.31^{\circ} 33^{\prime} \mathrm{N}, 77^{\circ} 59^{\prime} \mathrm{E}\right)$ | Located in Satluj valley between Taranda and |
|  | Wangtu, on the right bank of the Satluj river. |
| Kuno (Morang; $\left.31^{\circ} 38^{\prime} \mathrm{N}, 78^{\circ} 22^{\prime} \mathrm{E}\right)$ | Located in Satluj valley. |
| Labrang (Poo; $\left.31^{\circ} 41^{\prime} \mathrm{N}, 78^{\circ} 26^{\prime} \mathrm{E}\right)$ | Located in Satluj valley. |
| Poo (Poo; $\left.31^{\circ} 46^{\prime} \mathrm{N}, 78^{\circ} 35^{\prime} \mathrm{E}\right)$ | Located in Satluj valley. |
| Ropa (Poo; $\left.31^{\circ} 48^{\prime} \mathrm{N}, 78^{\circ} 25^{\prime} \mathrm{E}\right)$ | Located in Ropa valley. |
| Nako (Poo; $\left.31^{\circ} 53^{\circ} \mathrm{N}, 78^{\circ} 37^{\prime} \mathrm{E}\right)$ | Located in Hangrang valley. It is the highest vil- |
|  | lage in the valley (3,6oom). |

Swadesh basic vocabulary list (207 entries; Swadesh 1950, 1952, 1955) was used as the point of departure for preparing our primary questionnaire. The Swadesh list was, however, modified extensively. This included both removing almost a third of the entries in the Swadesh list as expressing concepts not suitable for this region for pragmatic reasons (e.g., some entries expressing concepts connected with the ocean), and instead adding a number of entries important for the present study (e.g., numerals, the honorific-non-honorific distinction in pronouns, reflexive pronouns). The length of the list increased somewhat, resulting in a concept list for the primary questionnaire with 237 entries. The complete list can be found in Appendix 5A to this chapter. Some items designed to elicit noun phrases and some sentence types were also included in the questionnaire, to examine, for example, the order of constituents at the phrase and clause levels, and also to examine the reflexive construction. In addition to the entries in the questionnaire, some additional data were also collected in each case, e.g., data on pronominal possessive constructions, example sentences to understand the linguistic status of a lexical item, as well as other lexical items, to understand the relationship of the lexical item in question to other words in the same semantic field. In the case of Kinnauri and Navakat (as well as

Indo-Aryan Kinnauri Pahari), we also collected lexical data based on the longer ( 1,460 entries) loanword typology list (Haspelmath and Tadmor 2009; Borin et al. 2013). These lists are provided in the chapters on Kinnauri (Chapter 2, Appendix 2A; 1,348 items), Navakat (Chapter 3, Appendix 3B; 1,135 items), and Kinnauri Pahari (Chapter 4, Appendix 4B; 1,215 items). All data items were trancribed in a broad phonetic transcription.

## 3

## Methodology

The present investigation falls under the heading of lexicostatistics, a long tradition of describing and (implicitly or explicitly) quantifying similarities and differences among language varieties using basic vocabulary lists. For an overview, see the chapters in Borin and Saxena (2013), especially Borin (2013). A revised Swadesh list has been the main basis for comparison of the KST varieties examined here (see Section 2). Using such concept lists presents its own methodological challenges (Borin 2012; Borin et al. 2021). A fundamental decision in this context is whether a particular concept is represented by the same item (word) in two language varieties.

Here we must first define what we mean by "the same item". In Swadeshstyle lexicostatistics, this is normally interpreted as cognacy, i.e., whether the items are reflexes of the same proto-language item. Finer points of (derivational) morphological structure are often disregarded in this context, and only cognacy of roots or stems is important. Even in this case, determining that two items are cognate is far from straightforward and requires expert knowledge, especially if the languages are only distantly related.

This arguably means that the information about genealogical grouping sought by these methods, to a large extent is already known by other means, e.g., the classical comparative method. The requisite expert knowledge is a scarce resource, and if we would like to conduct larger-scale genealogical linguistic investigations encompassing also poorly documented languages, we need some other way of doing this. When the expert knowledge is available, it serves as a valuable yardstick, a known gold standard against which less knowledge-intensive methods can be judged before being applied to those cases where less is known beforehand.

Lexicostatistical investigations such as that presented by Holman et al. (2008) rely on a mechanical procedure—automatically computed Levenshtein distance (also called edit distance) between strings transcribed using a standardized coarse phonetic transcription-for determining cognacy. This has the advantage of being totally consistent, and the disadvantage of both missing
some cognates and misclassifying some non-cognate pairs as cognates. However, the primary, most important requirement on such a method is that it is repeatable and objectively verifiable.

In dialect studies, the judgement of sameness may include also the sound shape and morphological structure of obviously cognate items in the sense of the preceding paragraph. This is the method chosen here when comparing the Kinnauri basic vocabulary lists: Certain—but not all—sound correspondences, and certain-but not all-morphological structures, are considered equal for the purpose of comparing lexical items among KST varieties.

A frequent presupposition in Swadesh-style lexicostatistics is that only one word from each language will represent each concept in the list. Here, we do not impose this restriction, however. Generally, with larger-scale investigations involving poorly documented language varieties that the researcher may not know well, this seems to be the only feasible alternative. In working with secondary sources and language consultants, presumably we will end up with one or several common expressions of the concept sought, regardless of their genealogical relationship to the corresponding expressions in related language varieties.

In our investigation, every correspondence gets one point, but multiple correspondences for the same concept still count as only one correspondence. Let us assume that a particular concept is expressed in the following way in four languages (capital letters represent forms/words):

## Language 1 Language 2 Language 3 Language 4

| $A$ | $A, B$ | A, B | B |
| :--- | :--- | :--- | :--- |

With this way of calculating similarity, languages 2 and 3 are as similar to each other as each of them is to language 1 and 4 , although languages 2 and 3 share two items in this concept slot. This solution is not completely arbitrary, but not very strongly motivated either. However, it can easily be reconsidered-e.g., if more information becomes available on these language varieties-and the results recalculated. The main point to be made here is that the calculation is completely deterministic and repeatable.

As has perhaps become clear from the preceding, compiling comparable systematic linguistic data for the present investigation has presented something of a challenge. One complicating factor here is that a language can have more than one word for a concept, and it is largely fortuitous which alternative or
alternatives the language consultants provide (Slaska 2005). Thus the data presented in the present work cannot be seen as complete. There may exist terms in a KST variety which have cognates in other varieties, which however do not happen to show up in our material. On the other hand, the terms provided by a consultant may say something about terms which are more neutral or more frequent or more basic than the other possible alternative forms which were not provided.

## 4 Towards Linguistically Informed Computational Lexicostatistics

The following proceedure was used in this investigation, developed in collaboration between a computational linguist (Lars Borin) and the author (see also Saxena and Borin 2011, 2013):

- After the data collection and initial processing of the data,
- a list of observations of relationships among varieties was made by the author.
- This list formed the basis for developing a set of principles for comparing the linguistic correspondences in these KST varieties. These were formulated by the author and the computational linguist together and their purpose was to determine which segmental differences to disregard for the purpose of considering items in different varietes the same.
- The principles were encoded by the computational linguist as context-sensitive phonetic segment transformation and equivalence rules in a small computer program for comparing items fully automatically in order to achieve consistency. ${ }^{2}$
- The program was then applied to the data, the result inspected, the rules revised, and the modified program run again on the data. This process went through a few iterations.
The procedure is a variant of automated lexicostatistics, a methodology that has seen a strong revival in recent years (see Borin and Saxena 2013), but in our case with a clear qualitative element (somewhat in the spirit of Grant 2010). Rather than adopting the standard solution of designing a completely automated method applying a similarity metric to orthographic words, we have

[^87]endeavored to include linguistic information into the process at an early stage. The results from the comparison come in the form of two kinds of tables:

- tables of individual concepts and lexical items expressing them, where each language variety gets a numerical index ( $1-9$ ), and each concept/language variety combination is provided with a list of indices showing which varieties share one or more expressions of this concept (see Appendix 5 A to this chapter);
- summary tables, where similarities among all lexical items of a particular grammatical or semantic category (nouns, kinship terms, etc.) are shown as ratios and percentages (see Section 5).
In the present investigation, the following principles were used in comparing word list items among varieties (in the list below, the following symbols are used: C: consonant; V: vowel; T: stop; Ø: zero/no segment).

Vowels: The following vowels appear to be in free variation in many of these varieties, and consequently the two members of each pair are considered equal for the purposes of our comparison, in any position:

$$
\mathrm{a} \sim \partial ; \mathrm{a} \sim \partial ; \mathrm{i} \sim \mathrm{I} ; \mathrm{u} \sim \delta ; \mathrm{e} \sim \varepsilon ; \mathrm{o} \sim \partial ; \mathrm{o} \sim \emptyset
$$

Note however that the similarities are not to be construed as transitive: e.g., a and $\rho$ do not count as the same.

Vowel length: Long and short vowels are not distinguished for the purposes of the comparison.

Vowel nasalization and phonemic tone: Nasalization is disregarded in the comparison, as is tone (orthographically marked on vowels in the transcription).

Consonants: The following consonants appear to be in free variation in many of these varieties, and consequently the members of each group are considered equal, in any position:

$$
\mathrm{d} 3 \sim \mathrm{dz} \sim \mathrm{z} \sim 3 ; \mathrm{p} \sim \mathrm{p}^{\mathrm{h}} \sim \mathrm{f} ; \mathrm{t} f \sim \mathrm{t}^{\mathrm{h}} \sim \mathrm{t} f ; \mathrm{s} \sim \mathrm{ts} \sim \mathrm{ts}^{\mathrm{h}}
$$

Consonant gemination: Short and long consonants are treated as one and the same, in any position:

$$
\mathrm{C}_{1}: \sim \mathrm{C}_{1}
$$

In the preliminary analysis of the sound systems of these varieties, there has been no indication that geminates are phonemic in any of them.

Prenasalization: Prenasalization of consonants is disregarded in the comparison.

Unreleased stops: Unreleased stops are treated as equal to the corresponding fully released stops in the comparison, ignoring voicing.

Sound sequences: The following sequences will be treated as equal for the purposes of the comparison, in any position:

$$
\mathrm{dr} \sim \mathrm{~d} ; \mathrm{tr} \sim \mathrm{t} ; \mathrm{V}_{1} \mathrm{jV}_{2} \sim \mathrm{~V}_{1} \mathrm{~V}_{2}
$$

Word endings: The following word ending alternants will be treated as equal for the purposes of the comparison:

$$
\begin{aligned}
& \text {-h } \sim-\emptyset ;- \text { ts } \sim-\emptyset ;- \text {-j - - } ; \\
& \text {-pa } \sim-\text { ba } \sim \text {-va; -po } \sim-\text { bo } \sim-\text { vo; } \\
& -V_{1} T \sim-V_{1}
\end{aligned}
$$

Illustrating with a concrete example, the last item in this list states that wordfinal stops are counted equal to $\emptyset$ following a vowel, as there is dialect-internal variation in this respect. Different stops are considered as separate, however. Thus, ja counts as the same as both jag and jak, but the latter two count as different forms (see yak in Table 54 in Appendix 5A).

Phrases: For terms such as older brother, younger brother, maternal AUNT, PATERNAL AUNT, if the term consists of more than one word, e.g., 'old sister', then the modifier is disregarded; only the noun is used for the comparison.

In order to achieve consistency of judgement, the above principles were encoded in a small computer program which then was used to compare items fully automatically. In practice, the principles were initially manually developed and then successively refined by an iterative process where the program was applied to the data and the results subsequently inspected. Typically during such a round we would find that the program had missed some correspondence that should have been found. Because the principles tended to be fairly conservative, the opposite almost never occurred. The great advantage of hav-
ing automated the application of the principles emerged in these situations, since a revision of the principles made on the basis of one or a few correspondences could be immediately tested on all the data in order to check that it would not introduce errors elsewhere.

This methodology is similar to recent work in dialectometry (e.g., Nerbonne and Heeringa 2009) and lexicostatistics (e.g., Holman et al. 2008; Wichmann et al. 2010) in relying on a completely automatic comparison of the items in the word lists. However, it differs from most of this work-a notable exception being the work reported on by McMahon et al. (2007) -in its usage of rules tailored to the particular linguistic configuration under investigation, rather than a general method for string comparison. In this respect, it falls somewhere in between traditional lexicostatistics-where expert statements are required about the cognacy of items-and these modern approaches-which rely entirely on surface clues for determining identity of items-although closer to the latter than the former.

The main methodological advantage of the approach used here is its consistency, and not as claimed for the work just referred to, that it should be language-independent. Instead, in our work we have tried to apply a principle sometimes formulated in computational linguistics as "Don't guess if you know" (Tapanainen and Voutilainen 1994: 47), which inevitably leads us to include language-specific knowledge in the form of correspondence rules among dialects.

## 5 Results: Vocabulary

In this section we will examine how much of basic vocabulary the investigated KST varieties share. We will look at the following kinds of basic vocabulary: a set of open-class words (nouns and adjectives), ${ }^{3}$ some adverbs of time, numerals and numeral systems, question words, and personal pronouns. Among the nouns, kinship and body-part terms are investigated separately.

In the vocabulary correspondence tables presented in this section we use the following notational conventions. Abbreviations (italicized in the tables) are used for the village names: Sangla (Sa), Nichar (Ni), Kalpa (Ka), Ropa (Ro), Chitkul (Ch), Labrang (La), Poo (Po), Kuno (Ku), Nako (Na). The full correspon-

[^88]dence tables are found in Appendix 5A at the end of this chapter (Tables 52-59). Vocabulary items refer to concepts and are identified by English words (or phrases on a few occasions) in small caps, both in the text and in the tables in Appendix 5A. Swadesh list items are further identified by their Swadesh list number added to the end of the English word and separated from the word by a slash: $L A U G H / 100$. Items without a number do not appear in the Swadesh list. There are 88 Swadesh list concepts in the questionnaire (see Appendix 5 A ). If a Swadesh list item is marked with an asterisk, this means that the item is in the subset of 40 Swadesh list items found to be the most stable globally by Holman et al. (2008). There are altogether 25 out of these 40 items in the questionnaire (see Section 5•7).

The longer noun and adjective tables (Tables 54 and 55 in Appendix 5A) are arranged with the English words in alphabetical order. The other tables are arranged according to other principles (semantically or by Swadesh number). In the correspondence tables, numerical indices in square brackets appear in each cell to identify the language varieties which share a form for this concept, i.e. items considered the same according to the formal principles presented above in Section 4. Multiple indices in the same cell are separated by slashes.

Each subsection below is structured in a similar way. One or more tables are presented containing summary statistics on shared vocabulary between all pairs of varieties, calculated from the full correspondences presented in Tables 52-59 in Appendix 5A. Two figures are provided for each pairwise comparison: a fraction and a percentage (rounded to an integer). In the fraction, the denominator represents the total number of concepts where some form is recorded for both varieties (for a number of reasons, sometimes a particular concept has not been recorded for some variety), and the numerator indicates how many of these forms that have been computed to be the same by the automatic procedure. Finally, we discuss some salient linguistic points of the comparison.

### 5.1 Basic Nouns

5.1.1 Kinship Terms

Table 52 shows the investigated kinship terms and the automatically computed correspondences among varieties, and Table 37 contains the summary statistics extracted from Table 52.

We will now look more closely at some of the individual kinship terms.
grandfather: Nako, Poo and Kuno use the term meme for grandfaTHER, while the other varieties use another term, tete. A modifier is added to specify maternal relationship in some varieties. Nichar, Kalpa, Ropa and Chitkul add this additional component. In all varieties where it appears it pre-

|  | $N i$ | Ka | Ro | Ch | La | Po | Ки | $N a$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sa | $\begin{aligned} & 12 / 18 \\ & (66 \%) \end{aligned}$ | $\begin{aligned} & 13 / 18 \\ & (72 \%) \end{aligned}$ | $\begin{aligned} & 9 / 18 \\ & (50 \%) \end{aligned}$ | $\begin{aligned} & 10 / 18 \\ & (55 \%) \end{aligned}$ | $\begin{aligned} & 6 / 18 \\ & (33 \%) \end{aligned}$ | $\begin{aligned} & 1 / 18 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & 1 / 18 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & 1 / 18 \\ & (5 \%) \end{aligned}$ |
| $N i$ |  | $\begin{aligned} & 9 / 18 \\ & (50 \%) \end{aligned}$ | $\begin{aligned} & 6 / 18 \\ & (33 \%) \end{aligned}$ | $\begin{aligned} & 7 / 18 \\ & (38 \%) \end{aligned}$ | $\begin{aligned} & 3 / 18 \\ & (16 \%) \end{aligned}$ | $\begin{aligned} & 0 / 18 \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & 0 / 18 \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \mathrm{o} / 18 \\ & (\mathrm{o} \%) \end{aligned}$ |
| Ka |  |  | $\begin{aligned} & 9 / 18 \\ & (50 \%) \end{aligned}$ | $\begin{aligned} & 8 / 18 \\ & (44 \%) \end{aligned}$ | $\begin{aligned} & 5 / 18 \\ & (27 \%) \end{aligned}$ | $\begin{aligned} & 1 / 18 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & 1 / 18 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & 1 / 18 \\ & (5 \%) \end{aligned}$ |
| Ro |  |  |  | $\begin{aligned} & 7 / 18 \\ & (38 \%) \end{aligned}$ | $\begin{aligned} & 7 / 18 \\ & (38 \%) \end{aligned}$ | $\begin{aligned} & 5 / 18 \\ & (27 \%) \end{aligned}$ | $\begin{aligned} & 4 / 18 \\ & (22 \%) \end{aligned}$ | $\begin{aligned} & 3 / 18 \\ & (16 \%) \end{aligned}$ |
| Ch |  |  |  |  | $\begin{aligned} & 4 / 18 \\ & (22 \%) \end{aligned}$ | $\begin{aligned} & 1 / 18 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & 1 / 18 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & 1 / 18 \\ & (5 \%) \end{aligned}$ |
| La |  |  |  |  |  | $\begin{aligned} & 6 / 18 \\ & (33 \%) \end{aligned}$ | $\begin{aligned} & 6 / 18 \\ & (33 \%) \end{aligned}$ | $\begin{aligned} & 5 / 18 \\ & (27 \%) \end{aligned}$ |
| Po |  |  |  |  |  |  | $\begin{aligned} & 13 / 18 \\ & (72 \%) \end{aligned}$ | $\begin{aligned} & 13 / 18 \\ & (72 \%) \end{aligned}$ |
| Ku |  |  |  |  |  |  |  | $\begin{aligned} & 13 / 18 \\ & (72 \%) \end{aligned}$ |

cedes the base form, and seemingly related forms (maperoŋ, mapo and matfa) are used. This modifier occurs also in the terms formaternal grandmother in the same varieties.
grandmother: It is plausible that the terms for grandmother in all these varieties has the same origin: In Sangla, Kalpa, Ropa, Chitkul and Labrang it is api, in Nichar it is ai, and in Nako, Poo and Kuno it is avi.

MOTHER: The same term occurs in all varieties for мотнеr. It is ama, except in Nichar, where it is $a v$.

FATHER: It is plausible that the terms for FATHER in all these varieties have the same origin, but has developed in three different ways, classifying these varieties in three groups. The term for father in Sangla, Nichar and Kalpa is bova/baba/bsba. In Ropa, Labrang, Poo, Kuno and Nako it is apa/ava and in Chitkul we find $a u$, presumably related to $a v a$. $a u$ also occurs as an alternate form in Kuno. The terms for MOTHER and FATHER in all KST varieties are etymologically related. They are: ama and (b)aba/ava (with the possible exception of Chitkul $a u$ if unrelated to $a v a$ ).

HUSBAND and WIFE: Except for some similarities in the terms for HUSBAND in some varieties, the terms for HUSBAND and WIFE do not exhibit a consistent
pattern. This may be partly due to the fact that there are several different ways of referring to the person who is a husband/wife, thus it is possible that different language consultants have provided different terms.
brother and sister: The terms for older brother classify these varieties into two groups. In Sangla, Nichar, Kalpa and Chitkul it is ate, while in Ropa, Labrang, Poo, Kuno and Nako it is atfo/azo. It seems that there are several terms for Younger brother in each variety, with different social functions. Some of these terms are borrowed from Indo-Aryan languages (e.g baja and other related terms in Table 52). The same is true also about the terms for YOUNGER SISTER and OLDER SISTER (including the use in many varieties of an Indo-Aryan term).

SON and DAUGHTER: The terms for SON and DAUGHTER classify these varieties into three groups. Sangla, Nichar, Kalpa, and Labrang have the terms $t^{h} a y$ and timed; Nako, Poo and Kuno have the terms tu: and pomo and Chitkul has the terms de atfi and dju at $i$, sON, DAUGHTER, respectively.
uncle and aunt: In Sangla, Nichar, Kalpa, Chitkul and Labrang, an IndoAryan loanword is used for maternal uncle, viz. moma, whereas in Nako, Poo, Kuno and Ropa, the term is azay. The words for paternal uncle at least in some cases are probably related to the terms for FATHER. It seems that the terms for Pate rnal aunt in most of the varieties have the same origin, which has developed in three different ways: nane in Sangla, Nichar and Kalpa, ane in Labrang, Poo, Kuno and Nako, and ene in Chitkul. Only Ropa exhibits a divergent term: tsima.

To summarize, looking at the kinship terms we can clearly differentiate a core Sangla group (Sangla, Nichar and Kalpa) from a core Nako group (Nako, Poo and Kuno), where these groups differ from each other regularly and consistently in all cases when the same term is not used in all varieties. With regard to the kinship terms Chitkul is generally similar to the Sangla group. Labrang and Ropa present interesting cases. In some cases (though not in identical cases) Labrang, for instance, has terms which are similar to the terms found in the Sangla group (e.g., the terms for GRANDMOTHER, SON, DAUGHTER, MATERNAL UNCLE), but with regard to other terms (e.g., the terms for GRANDFATHER, FATHER and BROTHER) it has terms which are similar to the terms found in the Nako group.

### 5.1.2 Body Parts

Table 53 shows the investigated basic body part words and the automatically computed correspondences among varieties, and Table 38 contains the summary statistics extracted from Table 53.

Generally, these KST varieties display the same Sino-Tibetan cognate forms for the terms for EYE, MOUTH and HAIR. Concerning the term for HAIR in these

|  | $N i$ | Ka | Ro | Ch | La | Po | Ки | $N a$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sa | $\begin{aligned} & 8 / 11 \\ & (72 \%) \end{aligned}$ | $\begin{aligned} & 10 / 11 \\ & (90 \%) \end{aligned}$ | $\begin{aligned} & 10 / 11 \\ & (90 \%) \end{aligned}$ | $\begin{aligned} & 2 / 11 \\ & (18 \%) \end{aligned}$ | $\begin{aligned} & 3 / 11 \\ & (27 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ |
| $N i$ |  | $\begin{aligned} & 8 / 11 \\ & (72 \%) \end{aligned}$ | $\begin{aligned} & 8 / 11 \\ & (72 \%) \end{aligned}$ | $\begin{aligned} & 2 / 11 \\ & (18 \%) \end{aligned}$ | $\begin{aligned} & 3 / 11 \\ & (27 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ |
| Ka |  |  | $\begin{aligned} & 10 / 11 \\ & (90 \%) \end{aligned}$ | $\begin{aligned} & 2 / 11 \\ & (18 \%) \end{aligned}$ | $\begin{aligned} & 3 / 11 \\ & (27 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ |
| Ro |  |  |  | $\begin{aligned} & 2 / 11 \\ & (18 \%) \end{aligned}$ | $\begin{aligned} & 3 / 11 \\ & (27 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ |
| Ch |  |  |  |  | $\begin{aligned} & 2 / 11 \\ & (18 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ |
| La |  |  |  |  |  | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ | $\begin{aligned} & 1 / 11 \\ & (9 \%) \end{aligned}$ |
| Po |  |  |  |  |  |  | $\begin{aligned} & 8 / 11 \\ & (72 \%) \end{aligned}$ | $\begin{aligned} & 10 / 11 \\ & (90 \%) \end{aligned}$ |
| Ku |  |  |  |  |  |  |  | $\begin{aligned} & 8 / 11 \\ & (72 \%) \end{aligned}$ |

varieties, all of them exhibit reflexes of the same proto-item, reconstructed as *kra for Proto-Sino-Tibetan. This item is realized in two different ways, however: kra and ta, the latter occurring in Poo, Kuno and Nako, while the former occurs in all the other varieties. The correspondence $k r \sim t$ reflects a deeper (in time) sound change than what the automatic correspondence rules used here are meant to capture. Hence, in Table 53, the varieties are classified into two groups with respect to the item HAIR.

Perusing Table 53, it is quite clear that in those cases where the KST varieties do not share a body part vocabulary item, the Sangla group and the Nako group consistently use different sets of terms.

Labrang and Chitkul fall somewhere in the middle, where they sometimes show more similarities to the forms in the Sangla group (e.g., FOOT and HAND), while in other cases they show more similarities with the forms in the Nako group (e.g., тоотн). Chitkul and Labrang form a separate group with regard to the terms used for head, eye, tail and face. There are also cases where Labrang and Chitkul use terms which they neither share with each other nor with any of the other two groups (e.g. NOSE). Apart from this, there are some terms either in Labrang (e.g. HAND, FOOT) or in Chitkul (e.g., HAND) which are unique.

TABLE 39 Summary statistics for basic nouns

|  | $N i$ | Ka | Ro | Ch | La | Po | Ки | $N a$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sa | $\begin{aligned} & 47 / 58 \\ & (81 \%) \end{aligned}$ | $\begin{aligned} & 49 / 59 \\ & (83 \%) \end{aligned}$ | $\begin{aligned} & 39 / 59 \\ & (66 \%) \end{aligned}$ | $\begin{aligned} & 35 / 59 \\ & (59 \%) \end{aligned}$ | $\begin{aligned} & 22 / 59 \\ & (37 \%) \end{aligned}$ | $\begin{aligned} & 9 / 59 \\ & (15 \%) \end{aligned}$ | $\begin{aligned} & 12 / 58 \\ & (20 \%) \end{aligned}$ | $\begin{aligned} & 11 / 58 \\ & (18 \%) \end{aligned}$ |
| $N i$ |  | $\begin{aligned} & 44 / 58 \\ & (75 \%) \end{aligned}$ | $\begin{aligned} & 34 / 58 \\ & (58 \%) \end{aligned}$ | $\begin{aligned} & 29 / 58 \\ & (50 \%) \end{aligned}$ | $\begin{aligned} & 20 / 58 \\ & (34 \%) \end{aligned}$ | $\begin{aligned} & 9 / 58 \\ & (15 \%) \end{aligned}$ | $\begin{aligned} & 11 / 57 \\ & (19 \%) \end{aligned}$ | $\begin{aligned} & 11 / 57 \\ & (19 \%) \end{aligned}$ |
| Ka |  |  | $\begin{aligned} & 38 / 59 \\ & (64 \%) \end{aligned}$ | $\begin{aligned} & 34 / 59 \\ & (57 \%) \end{aligned}$ | $\begin{aligned} & 21 / 59 \\ & (35 \%) \end{aligned}$ | $\begin{aligned} & 8 / 59 \\ & (13 \%) \end{aligned}$ | $\begin{aligned} & 11 / 58 \\ & (18 \%) \end{aligned}$ | $\begin{aligned} & 10 / 58 \\ & (17 \%) \end{aligned}$ |
| Ro |  |  |  | $\begin{aligned} & 29 / 59 \\ & (49 \%) \end{aligned}$ | $\begin{aligned} & 27 / 59 \\ & (45 \%) \end{aligned}$ | $\begin{aligned} & 11 / 59 \\ & (18 \%) \end{aligned}$ | $\begin{aligned} & 14 / 58 \\ & (24 \%) \end{aligned}$ | $\begin{aligned} & 13 / 58 \\ & (22 \%) \end{aligned}$ |
| Ch |  |  |  |  | $\begin{aligned} & 22 / 59 \\ & (37 \%) \end{aligned}$ | $\begin{aligned} & 9 / 59 \\ & (15 \%) \end{aligned}$ | $\begin{aligned} & 11 / 58 \\ & (18 \%) \end{aligned}$ | $\begin{aligned} & 10 / 58 \\ & (17 \%) \end{aligned}$ |
| La |  |  |  |  |  | $\begin{aligned} & 15 / 59 \\ & (25 \%) \end{aligned}$ | $\begin{aligned} & 18 / 58 \\ & (31 \%) \end{aligned}$ | $\begin{aligned} & 16 / 58 \\ & (27 \%) \end{aligned}$ |
| Po |  |  |  |  |  |  | $\begin{aligned} & 35 / 58 \\ & (60 \%) \end{aligned}$ | $\begin{aligned} & 39 / 58 \\ & (67 \%) \end{aligned}$ |
| Ки |  |  |  |  |  |  |  | $\begin{aligned} & 36 / 58 \\ & (62 \%) \end{aligned}$ |

On the whole, the pattern which emerges here is similar to the one as observed above, where Sangla, Nichar and Kalpa form a group-but now clearly with Ropa, too, belonging in the Sangla group-and Poo, Kuno and Nako form another group, with Chitkul and Labrang standing out as different from both the Sangla and Nako group and from each other.

### 5.1.3 Other Basic Nouns

Table 54 shows the investigated other basic nouns-i.e., other than kinship terms and body parts-and the automatically computed correspondences among varieties, and Table 39 contains the summary statistics extracted from Table 54.

Looking at the larger data set of Table 39, we again find the earlier two clear groupings: (1) Sangla, Nichar, and Kalpa; and (2) Poo, Kuno, and Nako. Ropa appears as slightly closer to the Sangla group than Chitkul is, whereas Labrang emerges as distinct from both the Sangla and Nako groups, although closer to the former.

Again we find cases where the simple automatic word comparison seems to miss obviously related words (e.g., EGG, STAR, WINTER) but this does not in itself mean that we need to revise the comparison rules (see Section 5.8).

TABLE 40 Summary statistics for basic adjectives

|  | $N i$ | Ka | Ro | Ch | La | Po | Ки | $N a$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sa | $\begin{aligned} & 14 / 19 \\ & (73 \%) \end{aligned}$ | $\begin{aligned} & 11 / 19 \\ & (57 \%) \end{aligned}$ | $\begin{aligned} & 11 / 19 \\ & (57 \%) \end{aligned}$ | $\begin{aligned} & 2 / 19 \\ & (10 \%) \end{aligned}$ | $\begin{aligned} & 2 / 19 \\ & (10 \%) \end{aligned}$ | $\begin{aligned} & 1 / 19 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & 1 / 19 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & 1 / 19 \\ & (5 \%) \end{aligned}$ |
| $N i$ |  | $\begin{aligned} & 12 / 19 \\ & (63 \%) \end{aligned}$ | $\begin{aligned} & 10 / 19 \\ & (52 \%) \end{aligned}$ | $\begin{aligned} & 1 / 19 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & 1 / 19 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & 0 / 19 \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \mathrm{o} / 19 \\ & (\mathrm{o} \%) \end{aligned}$ | $\begin{aligned} & 0 / 19 \\ & (0 \%) \end{aligned}$ |
| Ka |  |  | $\begin{aligned} & 12 / 19 \\ & (63 \%) \end{aligned}$ | $\begin{aligned} & 1 / 19 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & 1 / 19 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & 0 / 19 \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \mathrm{o} / 19 \\ & (\mathrm{o} \%) \end{aligned}$ | $\begin{aligned} & \text { o/19 } \\ & (0 \%) \end{aligned}$ |
| Ro |  |  |  | $\begin{aligned} & 2 / 19 \\ & (10 \%) \end{aligned}$ | $\begin{aligned} & 3 / 19 \\ & (15 \%) \end{aligned}$ | $\begin{aligned} & 1 / 19 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & \mathrm{o} / 19 \\ & (\mathrm{o} \%) \end{aligned}$ | $\begin{aligned} & 1 / 19 \\ & (5 \%) \end{aligned}$ |
| Ch |  |  |  |  | $\begin{aligned} & 9 / 19 \\ & (47 \%) \end{aligned}$ | $\begin{aligned} & 1 / 19 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & \mathrm{o} / 19 \\ & (\mathrm{o} \%) \end{aligned}$ | $\begin{aligned} & 1 / 19 \\ & (5 \%) \end{aligned}$ |
| La |  |  |  |  |  | $\begin{aligned} & 1 / 19 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & \mathrm{o} / 19 \\ & (\mathrm{o} \%) \end{aligned}$ | $\begin{aligned} & 1 / 19 \\ & (5 \%) \end{aligned}$ |
| Po |  |  |  |  |  |  | $\begin{aligned} & 12 / 19 \\ & (63 \%) \end{aligned}$ | $\begin{aligned} & 14 / 19 \\ & (73 \%) \end{aligned}$ |
| Ku |  |  |  |  |  |  |  | $\begin{aligned} & 11 / 19 \\ & (57 \%) \end{aligned}$ |

### 5.2 Basic Adjectives

Table 55 shows the investigated basic adjectives and the automatically computed correspondences among varieties, and Table 40 contains the summary statistics extracted from Table 55 .

The adjectives, too, confirm the grouping that we have observed above. Even though the data set is small, the trend is obvious: Poo, Kuno and Nako form one group, and Sangla, Nichar, Kalpa and Ropa form another group. This is very clear for the majority of the adjectives in Table 55. Again, Chitkul and Labrang stand apart: In some cases a similar form occurs in both languages (e.g. fosi DRY in both Labrang and Chitkul and also some of the color terms). But there are also cases (e.g., GOOD, WET) where separate forms occur in Labrang and Chitkul. If the forms in Labrang and Chitkul show similarity with any of the two clearer groupings, it is rather with the Sangla group than the Nako group; see, e.g., the terms for beautiful, old and new.

### 5.3 Some Adverbs of Time

Table 56 shows the investigated adverbs of time and the automatically computed correspondences among varieties, and Table 41 contains the summary statistics extracted from Table 56.

TABLE 41 Summary statistics for time adverbs

|  | Ni | $\boldsymbol{K a}$ | Ro | Ch | La | Po | Ки | $N a$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sa | $\begin{aligned} & 4 / 10 \\ & (40 \%) \end{aligned}$ | $\begin{aligned} & 8 / 10 \\ & (80 \%) \end{aligned}$ | $\begin{aligned} & 4 / 10 \\ & (40 \%) \end{aligned}$ | $\begin{aligned} & \text { o/8 } \\ & (\mathrm{o}) \end{aligned}$ | $\begin{aligned} & 2 / 9 \\ & (22 \%) \end{aligned}$ | $\begin{aligned} & \text { ०/9 } \\ & (\circ \%) \end{aligned}$ | $\begin{aligned} & \text { o/8 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \mathrm{o} / 10 \\ & (\mathrm{o} \%) \end{aligned}$ |
| $N i$ |  | $\begin{aligned} & 5 / 10 \\ & (50 \%) \end{aligned}$ | $\begin{aligned} & 5 / 10 \\ & (50 \%) \end{aligned}$ | $\begin{aligned} & \text { o/8 } \\ & (\mathrm{o}) \end{aligned}$ | $\begin{aligned} & 3 / 9 \\ & (33 \%) \end{aligned}$ | $\begin{aligned} & \text { ०/9 } \\ & (\circ \%) \end{aligned}$ | $\begin{aligned} & \text { o/8 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \mathrm{o} / 10 \\ & (\mathrm{o} \%) \end{aligned}$ |
| Ka |  |  | $\begin{aligned} & 5 / 10 \\ & (50 \%) \end{aligned}$ | $\begin{aligned} & \text { o/8 } \\ & (\mathrm{o}) \end{aligned}$ | $\begin{aligned} & 2 / 9 \\ & (22 \%) \end{aligned}$ | $\begin{aligned} & \text { o/9 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \text { o/8 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \mathrm{o} / 10 \\ & (\mathrm{o} \%) \end{aligned}$ |
| Ro |  |  |  | $\begin{aligned} & \text { o/8 } \\ & (\mathrm{o}) \end{aligned}$ | $\begin{aligned} & 2 / 9 \\ & (22 \%) \end{aligned}$ | $\begin{aligned} & \text { o/9 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \text { o/8 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \mathrm{o} / 10 \\ & (\mathrm{o} \%) \end{aligned}$ |
| Ch |  |  |  |  | $\begin{aligned} & \text { ०/7 } \\ & (\mathrm{o} \%) \end{aligned}$ | $\begin{aligned} & \text { o/8 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \text { ०/7 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \text { o/8 } \\ & (0 \%) \end{aligned}$ |
| La |  |  |  |  |  | $\begin{aligned} & \text { o/8 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \text { o/8 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \text { o/9 } \\ & (0 \%) \end{aligned}$ |
| Po |  |  |  |  |  |  | $\begin{aligned} & 4 / 8 \\ & (50 \%) \end{aligned}$ | 6/9 $(66 \%)$ |
| Ku |  |  |  |  |  |  |  | $\begin{aligned} & 4 / 8 \\ & (50 \%) \end{aligned}$ |

This material is too small to draw any conclusions beyond the fact that it supports the same groupings of the language varieties as the previously presented vocabulary subsets. The time expressions are a bit too complex for the simple mechanical comparison used here to work well. Manual inspection of the expressions shows some fairly obvious connections which are not captured by the rules, e.g., Sangla rigtsomja versus Nichar/ Kalpa/ Ropa riktsomja/riktsomja 2 DAYS BEFORE TOMORROW.

This set of terms seems to classify the KST varieties into roughly the same groups as other lexical-semantic fields discussed in this chapter, Sangla, Nichar, Ropa, Kalpa form one group. Concerning the terms for future time points too, these languages are similar to one another. They form one group. All languages in this group make (at least) a five-way distinction in the future (томOrrow, 1-4 DAYS AFTER TOMORROW) and the terms used to express these concepts in these languages are also very similar.

Generally speaking, Poo and Nako form another group, though they also differ slightly from each other-both in terms of the number of distinctions made lexically in referring to the past and to the future, as well as the forms used. Nako has a more detailed system, with separate lexical terms for up to 4 DAYS BEFORE

TAbLE 42 Summary statistics for KST numerals

|  | $N i$ | Ka | Ro | Ch | La | Po | Ки | $N a$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sa | $\begin{aligned} & 17 / 25 \\ & (68 \%) \end{aligned}$ | $\begin{aligned} & 16 / 25 \\ & (64 \%) \end{aligned}$ | $\begin{aligned} & 16 / 25 \\ & (64 \%) \end{aligned}$ | $\begin{aligned} & 13 / 25 \\ & (52 \%) \end{aligned}$ | $\begin{aligned} & 7 / 25 \\ & (28 \%) \end{aligned}$ | $\begin{aligned} & 1 / 25 \\ & (4 \%) \end{aligned}$ | $\begin{aligned} & 2 / 25 \\ & (8 \%) \end{aligned}$ | $\begin{aligned} & 2 / 25 \\ & (8 \%) \end{aligned}$ |
| $N i$ |  | $\begin{aligned} & 17 / 25 \\ & (68 \%) \end{aligned}$ | $\begin{aligned} & 16 / 25 \\ & (64 \%) \end{aligned}$ | $\begin{aligned} & 12 / 25 \\ & (48 \%) \end{aligned}$ | $\begin{aligned} & 6 / 25 \\ & (24 \%) \end{aligned}$ | $\begin{aligned} & 1 / 25 \\ & (4 \%) \end{aligned}$ | $\begin{aligned} & 2 / 25 \\ & (8 \%) \end{aligned}$ | $\begin{aligned} & 2 / 25 \\ & (8 \%) \end{aligned}$ |
| Ka |  |  | $\begin{aligned} & 18 / 25 \\ & (72 \%) \end{aligned}$ | $\begin{aligned} & 15 / 25 \\ & (60 \%) \end{aligned}$ | $\begin{aligned} & 7 / 25 \\ & (28 \%) \end{aligned}$ | $\begin{aligned} & 1 / 25 \\ & (4 \%) \end{aligned}$ | $\begin{aligned} & 2 / 25 \\ & (8 \%) \end{aligned}$ | $\begin{aligned} & 2 / 25 \\ & (8 \%) \end{aligned}$ |
| Ro |  |  |  | $\begin{aligned} & 14 / 25 \\ & (56 \%) \end{aligned}$ | $\begin{aligned} & 7 / 25 \\ & (28 \%) \end{aligned}$ | $\begin{aligned} & 1 / 25 \\ & (4 \%) \end{aligned}$ | $\begin{aligned} & 2 / 25 \\ & (8 \%) \end{aligned}$ | $\begin{aligned} & 2 / 25 \\ & (8 \%) \end{aligned}$ |
| Ch |  |  |  |  | $\begin{aligned} & 5 / 25 \\ & (20 \%) \end{aligned}$ | $\begin{aligned} & 1 / 25 \\ & (4 \%) \end{aligned}$ | $\begin{aligned} & 2 / 25 \\ & (8 \%) \end{aligned}$ | $\begin{aligned} & 2 / 25 \\ & (8 \%) \end{aligned}$ |
| $L a$ |  |  |  |  |  | $\begin{aligned} & 3 / 25 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 5 / 25 \\ & (20 \%) \end{aligned}$ | $\begin{aligned} & 4 / 25 \\ & (16 \%) \end{aligned}$ |
| Po |  |  |  |  |  |  | $\begin{aligned} & 18 / 25 \\ & (72 \%) \end{aligned}$ | $\begin{aligned} & 16 / 25 \\ & (64 \%) \end{aligned}$ |
| Кu |  |  |  |  |  |  |  | $\begin{aligned} & 17 / 25 \\ & (68 \%) \end{aligned}$ |

yesterday and 4 DAys after tomorrow, whereas Poo has distinct terms for up to 2 DAYS BEFORE YESTERDAY and 2 DAYS AFTER TOMORROW. Despite this difference, the forms (when the distinction is there in both languages) are quite similar in Nako and Poo. The manual and automatic analysis agree with respect to the positions of Labrang and Chitkul: If Labrang displays any similarity with any of the other groups, it is with the terms found in the Sangla group, e.g., in the terms for TODAY, 1 DAY AFTER TOMORROW and 3 DAYS AFTER TOMORROW. Chitkul, which exhibits a detailed system in this regard, does not show similarities with any of the other varieties.

### 5.4 Numerals and Numeral Systems

Table 57 shows the investigated numerals and the automatically computed correspondences among varieties, and Table 42 contains the summary statistics extracted from Table 57.

The examination of the numerals $1-10$ suggests a similar grouping of the KST varieties as observed above, where Sangla, Nichar, Kalpa, and Ropa constitute one group and Poo, Kuno and Nako constitute another group. Except for $g \varepsilon t$ eight in Labrang, Chitkul and Labrang numerals are similar to the forms
found in the Sangla group. The numerals $1-10$ in the KST varieties are cognate to a very large extent (see Table 43 below). They are consistent with the SinoTibetan numeral forms noted by Hodson (1913).

For the numerals two, three, five, six and nine the same cognates are found in all varieties (with some phonological modifications). The case of the numeral THREE is interesting: Even though the same cognate occurs in all varieties, it is realized in three different ways: Sangla, Nichar, Kalpa and Ropa form one group (fum/sum), Chitkul and Labrang form another group (homo/hom) and Nako and Poo form a third group (sum). For the numerals one, four, seven, eight and ten these varieties use two distinct cognate forms: Poo, Kuno and Nako agree among themselves and use the same form as is noted by Hodson (1913) for Central Tibetan (namely, $t f_{i k}$, $j i / z i k$, don, get/gjat, respectively), Nichar, Sangla, Kalpa, Ropa, Chitkul and Labrang use another set of forms (namely, $I d, p a,(s) t I \int, r \varepsilon / r a j \varepsilon, s \varepsilon / s a j \varepsilon$, respectively). This set of forms, too, is noted by Hodson (1913). In Table 43, the forms for the numerals $1-10$ in the KST varieties are shown together with the reconstructed Proto-Sino-Tibetan (PST) forms for these numerals (Matisoff 2003).

A similar subgrouping pattern emerges also concerning the formation of higher numerals in the KST varieties. Generally speaking, two different systems for forming the numerals 20-99 are found in these varieties. Sangla, Nichar and Kalpa form one group. They exhibit a vigesimal system, i.e., one where the basic units are multiples of twenty. Multiples of ten which are not also multiples of twenty (THIRTY, FIFTY, SEVENTY, NINETY) are indicated as 'plus ten', with one exception: The term for FIFTY in Ropa is is $n I f$ nidzv ad ${ }^{h} a y$ ('two twenty half'). Concerning all other higher numerals, Ropa is consistent with the pattern (and forms) of the Sangla group. Nako and Poo, on the other hand, exhibit a consistent decimal system. Labrang is interesting in this regard. It shows a decimal system for 30 , but for higher multiples of ten it exhibits the same kind of vigesimal system as in the Sangla group.

The numeral system in Kuno distinguishes itself remarkably from the systems found in the other varieties. First, Kuno has both a decimal and a vigesimal system side by side. ${ }^{4}$ In the vigesimal system there are important differences between the patterns exhibited in Kuno and in the Sangla group. This concerns both the ordering of smaller numerals in forming higher numerals (e.g $2 \times 20$ in Sangla, but $20 \times 2$ in Kuno) as well as the structure of higher numerals in Kuno and in the Sangla group. In Kuno va and nay occur in higher

[^89]TABLE 43 Numerals 1-10 in KST varieties in comparison with reconstructed Proto-SinoTibetan (PST)

|  | Sa | $N i$ | Ka | Ro | Ch | La | Po | Ки | $N a$ | PST |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Id |  |  | Id/i | $i$ |  | $t i k$ |  |  | ${ }^{*} t(y) a k \sim{ }^{*} g t(y) i k ; *$ *it |
| 2 | $n I f$ |  |  |  | $n i f i$ | nif |  | ni: |  | *gnis |
| 3 | som |  |  |  | homo | hom |  | sum |  | *gsum |
| 4 | $p a / p$ |  |  |  |  |  | $3^{i}$ |  |  | *bly |
| 5 | na |  |  |  |  |  |  |  |  | *bya, lya |
| 6 | tug |  | tuk |  | tu |  | $t^{h}$ ok |  | $\cdots$ | *druk, *kruk |
| 7 | (s)tif |  | tif |  |  | Jinif |  | dun |  | *snis |
| 8 | $r \varepsilon$ | rajz/raje |  |  | rea | $g \varepsilon t ?$ |  | gjet |  | *brgyat ~ *bgryat |
| 9 | gui | sgui | gui |  |  | $g u$ |  | gu |  | *dgaw, *skzw |
| 10 | $s \varepsilon$ | sajz/saje |  |  | sja | sa |  | $t u$ |  | *g(y)ip; *ts $(y) i(y) \sim$ *tsyay |

numerals, $v a$ indicating multiplication and nay addition, so that, e.g., FIFTY is literally expressed as 'twenty times (va) two plus (naj) ten' in Kuno, whereas it is 'two twenty ten' in the Sangla group. However, in the decimal system also used in Kuno, the order is multiplier-base-addend, as in all the other varieties: duntfu tfik [seven.ten one] SEVENTY-ONE (also nifuva sumnay tfugfik [twenty.va three.nay eleven]).

Two separate terms (ra and $g j a / g^{h} e j a$ ) occur for the numeral 100 in the KST varieties. $r a$ occurs in Sangla, Nichar, Kalpa and Chitkul and $g j a / g^{h} e j a ~ o c c u r s ~ i n ~$ Labrang, Poo, Kuno and Nako. According to Hodson (1913), both ra and gja are variations of the Central Tibetan form rgya. In Hodson's view, this form cannot be analyzed as forming part of a decimal or vigesimal system, instead it is a separate distinct form.

Interesting differences are observable in the composition of the words for $500,1,000$ and 1,001 between the Sangla group (including in this case Labrang
and Chitkul) and the Nako group. The order of constituents is $5 \times 100$ for 500 in all varieties. The term for 1,000 in the Sangla group is hazar (which is a loanword from Indo-Aryan), but it is ton in the Nako group. ${ }^{5}$

Despite these differences, all KST varieties (except the Kuno vigesimal system) examined here form their composite numerals in the same way. When higher numerals are made by multiplication, the multiplier precedes the base, regardless of whether the variety uses a decimal or vigesimal numeral system. ${ }^{6}$ For example, FORTY will be expressed as $2 \times 20$ or $4 \times 10$, and not $20 \times 2 / 10 \times 4$. In the case of the formation of higher numbers by addition, the base precedes the (smaller) number which is being added to it. For example, so nif $(10+2)$ twelve; soja $(10+5)$ Fifteen in Kinnauri, and tyokni $(10+2)$ TWELVE; tfeŋga $(10+5)$ FIFTEEN in Navakat. In higher numbers formed by both multiplication and addition, the order becomes multiplier-base-addend, as expected. e.g.: $3 \times 10+2=32$. Further, all KST varieties use their ordinary numerals for forming higher numerals, although sometimes this is obscured by the result of phonological or morphophonological changes.

In all the varieties, except Poo, Kuno and Nako, no functional morpheme is added between the base ( 20 or 10 ) and the smaller numeral. In Poo and Nako more than one morpheme is found (see items thirty-one, Forty-one, and Seventy-one in Table 57). ${ }^{7}$ As seen above, in Kuno, there are additional morphemes for both multiplication ( $v a$ ) and addition ( $n a \eta$ ).

On the whole, the numerals examined here are quite consistent with the observations made by Hodson (1913) for Sino-Tibetan languages. The forms of the numerals support the observations made above concerning the classification of KST varieties, where Sangla, Kalpa, Ropa, Chitkul and Labrang and Nichar form one group and Nako and Poo form another group-the former, for example, exhibiting a modified vigesimal system and the latter exhibiting a decimal system.

### 5.5 Basic Question Words

Table 58 shows the investigated basic question words and the automatically computed correspondences among varieties, and Table 44 contains the summary statistics extracted from Table 58.

[^90]TABLE 44 Summary statistics for basic question words

|  | $N i$ | Ka | Ro | Ch | La | Po | Ки | $N a$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $S a$ | $\begin{aligned} & 3 / 5 \\ & (60 \%) \end{aligned}$ | $\begin{aligned} & 3 / 5 \\ & (60 \%) \end{aligned}$ | $\begin{aligned} & 3 / 5 \\ & (60 \%) \end{aligned}$ | $\begin{aligned} & \text { o/5 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & 0 / 4 \\ & (\mathrm{o} \%) \end{aligned}$ | $\begin{aligned} & 0 / 5 \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & 0 / 4 \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \text { o/5 } \\ & (0 \%) \end{aligned}$ |
| $N i$ |  | $\begin{aligned} & 3 / 5 \\ & (60 \%) \end{aligned}$ | $\begin{aligned} & 3 / 5 \\ & (60 \%) \end{aligned}$ | $\begin{aligned} & 0 / 5 \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & 0 / 4 \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & 0 / 5 \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \text { o/4 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & 0 / 5 \\ & (0 \%) \end{aligned}$ |
| Ka |  |  | $\begin{aligned} & 4 / 5 \\ & (80 \%) \end{aligned}$ | $\begin{aligned} & 1 / 5 \\ & (20 \%) \end{aligned}$ | $\begin{aligned} & \mathrm{o} / 4 \\ & (\mathrm{o} \%) \end{aligned}$ | $\begin{aligned} & \text { o/5 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \text { o/4 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \text { o/5 } \\ & (0 \%) \end{aligned}$ |
| Ro |  |  |  | $\begin{aligned} & 1 / 5 \\ & (20 \%) \end{aligned}$ | $\begin{aligned} & 0 / 4 \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & 0 / 5 \\ & (\mathrm{o} \%) \end{aligned}$ | $\begin{aligned} & 0 / 4 \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & 0 / 5 \\ & (0 \%) \end{aligned}$ |
| Ch |  |  |  |  | $\begin{aligned} & \text { o/4 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & 1 / 5 \\ & (20 \%) \end{aligned}$ | $\begin{aligned} & 1 / 4 \\ & (25 \%) \end{aligned}$ | $\begin{aligned} & 1 / 5 \\ & (20 \%) \end{aligned}$ |
| La |  |  |  |  |  | $\begin{aligned} & 0 / 4 \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \text { o/4 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \mathrm{o} / 4 \\ & (\mathrm{o} \%) \end{aligned}$ |
| Po |  |  |  |  |  |  | $\begin{aligned} & 4 / 4 \\ & (100 \%) \end{aligned}$ | $\begin{aligned} & 4 / 5 \\ & (80 \%) \end{aligned}$ |
| Ku |  |  |  |  |  |  |  | $\begin{aligned} & 4 / 4 \\ & (100 \%) \end{aligned}$ |

In all cases, Poo, Kuno, and Nako exhibit the same cognate for the question words (even if the automated comparison does not always show this; see Section 4). On the whole, it seems that the forms in Sangla, Nichar, Kalpa, and Ropa are also etymologically related. As earlier, Chitkul and Labrang stand apart, sometimes siding with the Nako group (wHO in Chitkul), sometimes with the Sangla group (HOW in both Chitkul and Labrang), and sometimes exhibiting unique forms (wHO in Labrang; WHERE in Chitkul).

### 5.6 Personal Pronouns

Table 59 shows the investigated personal pronouns and the automatically computed correspondences among varieties, and Table 45 contains the summary statistics extracted from Table 5A.8.

All the KST varieties examined here share some similarities with regard to their pronominal systems: First, in the second person the honorific-nonhonorific distinction is made in all varieties (e.g., ka 2SG.NH, ki 2SG.H in Sangla; $k^{h}{ }^{\prime} \eta$ 2SG.H, $k^{h} \emptyset t$ 2SG.NH in Nako). Further, the plural pronominal forms are made by suffixing a plural marker to the corresponding singular pronominal form.

TABLE 45 Summary statistics for personal pronouns

|  | $N i$ | Ka | Ro | Ch | La | Po | Ки | $N a$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sa | $\begin{aligned} & 6 / 8 \\ & (75 \%) \end{aligned}$ | $\begin{aligned} & 6 / 8 \\ & (75 \%) \end{aligned}$ | $\begin{aligned} & 4 / 8 \\ & (50 \%) \end{aligned}$ | $\begin{aligned} & 4 / 7 \\ & (57 \%) \end{aligned}$ | $\begin{aligned} & 3 / 8 \\ & (37 \%) \end{aligned}$ | $\begin{aligned} & \text { o/7 } \\ & (\mathrm{o} \mathrm{\%}) \end{aligned}$ | $\begin{aligned} & \text { o/6 } \\ & (\mathrm{o} \%) \end{aligned}$ | $\begin{aligned} & \text { o/9 } \\ & \text { (o\%) } \end{aligned}$ |
| $N i$ |  | $\begin{aligned} & 5 / 7 \\ & (71 \%) \end{aligned}$ | $\begin{aligned} & 5 / 7 \\ & (71 \%) \end{aligned}$ | $\begin{aligned} & 5 / 7 \\ & (71 \%) \end{aligned}$ | $\begin{aligned} & 3 / 7 \\ & (42 \%) \end{aligned}$ | $\begin{aligned} & \text { o/7 } \\ & (\mathrm{o}) \end{aligned}$ | $\begin{aligned} & \text { o/6 } \\ & \text { (०\%) } \end{aligned}$ | $\begin{aligned} & \text { o/8 } \\ & (\mathrm{o} \%) \end{aligned}$ |
| Ka |  |  | $\begin{aligned} & 4 / 7 \\ & (57 \%) \end{aligned}$ | $\begin{aligned} & 4 / 7 \\ & (57 \%) \end{aligned}$ | $\begin{aligned} & 3 / 8 \\ & (37 \%) \end{aligned}$ | $\begin{aligned} & \text { o/6 } \\ & (\mathrm{o} \%) \end{aligned}$ | $\begin{aligned} & \text { o/6 } \\ & (\mathrm{o} \%) \end{aligned}$ | $\begin{aligned} & \text { o/8 } \\ & (\mathrm{o} \%) \end{aligned}$ |
| Ro |  |  |  | $\begin{aligned} & 5 / 6 \\ & (83 \%) \end{aligned}$ | $\begin{aligned} & 3 / 7 \\ & (42 \%) \end{aligned}$ | $\begin{aligned} & \text { o/6 } \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & 0 / 5 \\ & (0 \%) \end{aligned}$ | $\begin{aligned} & \text { o/8 } \\ & (\mathrm{o} \%) \end{aligned}$ |
| Ch |  |  |  |  | $\begin{aligned} & 3 / 7 \\ & (42 \%) \end{aligned}$ | $\begin{aligned} & \text { o/6 } \\ & (\mathrm{o} \%) \end{aligned}$ | $\begin{aligned} & \text { o/6 } \\ & \text { (०\%) } \end{aligned}$ | $\begin{aligned} & \mathrm{o} / 7 \\ & (\mathrm{o} \%) \end{aligned}$ |
| La |  |  |  |  |  | $\begin{aligned} & \text { o/6 } \\ & (\mathrm{o} \%) \end{aligned}$ | $\begin{aligned} & \text { o/6 } \\ & \text { (o\%) } \end{aligned}$ | $\begin{aligned} & \mathrm{o} / 8 \\ & (\mathrm{o} \%) \end{aligned}$ |
| Po |  |  |  |  |  |  | $\begin{aligned} & 3 / 6 \\ & (50 \%) \end{aligned}$ | $\begin{aligned} & 3 / 7 \\ & (42 \%) \end{aligned}$ |
| Ku |  |  |  |  |  |  |  | $\begin{aligned} & 4 / 6 \\ & (66 \%) \end{aligned}$ |

Apart from this, with regard to the pronominal forms, varieties fall into two groups: Sangla, Nichar, Kalpa, Ropa, Chitkul, and Labrang form one group and Poo, Kuno and Nako constitute another group. The two groups differ from each other consistently in this regard. Generally speaking, there is more homogeneity within the first group than within the second group regarding the pronominal forms. The same base forms for 2SG.H (ki) and 2SG.NH (kz) occur in the Sangla, Kalpa, Nichar, Ropa, Chitkul and Labrang varieties. Poo, Kuno and Nako have the same base form for the 2SG non-honorific: $k^{h} \varnothing \vec{t}$, but they have three distinct forms for the 2SG honorific pronoun: net in Poo; rue in Kuno; and $k^{h} o ́ \eta$ in Nako. In all KST varieties, the 2PL is formed by affixing a plural marker to the 2SG pronoun (for example, ki 2SG.H and ki-no 2SG.H-PL in Sangla). This is the case in both the second person honorific as well as non-honorific forms in all varieties. These varieties, however, do not use the same plural markers. If we concentrate our attention on the Sangla group it is, -no in Sangla (e.g., kins 2PL.H), but it is $-\int$ in Kalpa, -tfay in Chitkul (e.g. katfay 2PL.NH) and -pay in Labrang (e.g. kmpay).

The 3 SG and 3PL forms in KST varieties, too, classify these varieties in two groups: Poo, Kuno, and Nako form one group. They have the same base form

3SG. It is $k^{h}$. This is distinct from the forms (e.g., do) found in the Sangla group (including Chitkul and Labrang). ${ }^{8}$ With the exception of Ropa which in our material has ono as the 3SG pronoun, all other varieties of this group (including Chitkul and Labrang) have forms which are also found in Sangla. ${ }^{9}$ The formation of the plural form in the third person is the same as that of the second person in these varieties-the plural marker is suffixed to the pronoun. But it seems that the plural markers are not necessarily the same in second and third person pronouns. Compare ki-no 2SG.H-PL, but do-go 3SG-PL in Sangla, ki$\int i 2$ SG.H-PL and $n v-g o$ 3SG-PL in Kalpa. This seems to be the case in all varieties, except Nako and Poo, where the same plural markers occur in all persons. See Chapters 2 and 3 for more detailed information on plural formation in Kinnauri and Navakat.

To summarize, the pronominal systems (including the pronominal forms) in these varieties classify Sangla, Nichar, Ropa, Kalpa, Chitkul and Labrang varieties in one group and Poo, Kuno and Nako as a separate group. The two groups differ from each other in all cases concerning their pronominal forms. The only similarities between these two groups are structural: Both groups make a honorific-non-honorific distinction in the second person, and the plural pronouns are formed in both groups by suffixing the plural marker to the corresponding singular pronouns.

### 5.7 Basic Vocabulary: Summary and Discussion

In Table 46 the combined statistics from a comparison of all nouns is presented, i.e., the figures from Tables 37 (kinship terms), 38 (body part terms) and 39 (other basic nouns) are combined into one in Table 46.

Since the individual comparisons of the noun subsets painted a unanimous picture of the classification of the KST varieties, it should come as no surprise that the combined noun statistics provides evidence for the same groupings.

Table 47 summarizes the comparison statistics for the whole lexical questionnaire. As can be seen from the denominators in the fractions, there is no single pair of varieties where all the 157 questionnaire concepts have been recorded in both members of the pair. However, they share from 149 (e.g., Kuno-Nako) to 155 recorded concepts (e.g., Sangla-Nako).

[^91]TABLE 46 Summary statistics for all nouns

|  | $N i$ | Ka | Ro | Ch | La | Po | Ки | $N a$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sa | $\begin{aligned} & 67 / 87 \\ & (77 \%) \end{aligned}$ | $\begin{aligned} & 72 / 88 \\ & (81 \%) \end{aligned}$ | $\begin{aligned} & 58 / 88 \\ & (65 \%) \end{aligned}$ | $\begin{aligned} & 47 / 88 \\ & (53 \%) \end{aligned}$ | $\begin{aligned} & 31 / 88 \\ & (35 \%) \end{aligned}$ | $\begin{aligned} & 11 / 88 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 14 / 87 \\ & (16 \%) \end{aligned}$ | $\begin{aligned} & 13 / 87 \\ & (14 \%) \end{aligned}$ |
| $N i$ |  | $\begin{aligned} & 61 / 87 \\ & (70 \%) \end{aligned}$ | $\begin{aligned} & 48 / 87 \\ & (55 \%) \end{aligned}$ | $\begin{aligned} & 38 / 87 \\ & (43 \%) \end{aligned}$ | $\begin{aligned} & 26 / 87 \\ & (29 \%) \end{aligned}$ | $\begin{aligned} & 10 / 87 \\ & (11 \%) \end{aligned}$ | $\begin{aligned} & 12 / 86 \\ & (13 \%) \end{aligned}$ | $\begin{aligned} & 12 / 86 \\ & (13 \%) \end{aligned}$ |
| Ka |  |  | $\begin{aligned} & 57 / 88 \\ & (64 \%) \end{aligned}$ | $\begin{aligned} & 44 / 88 \\ & (50 \%) \end{aligned}$ | $\begin{aligned} & 29 / 88 \\ & (32 \%) \end{aligned}$ | $\begin{aligned} & 10 / 88 \\ & (11 \%) \end{aligned}$ | $\begin{aligned} & 13 / 87 \\ & (14 \%) \end{aligned}$ | $\begin{aligned} & 12 / 87 \\ & (13 \%) \end{aligned}$ |
| Ro |  |  |  | $\begin{aligned} & 38 / 88 \\ & (43 \%) \end{aligned}$ | $\begin{aligned} & 37 / 88 \\ & (42 \%) \end{aligned}$ | $\begin{aligned} & 17 / 88 \\ & (19 \%) \end{aligned}$ | $\begin{aligned} & 19 / 87 \\ & (21 \%) \end{aligned}$ | $\begin{aligned} & 17 / 87 \\ & (19 \%) \end{aligned}$ |
| Ch |  |  |  |  | $\begin{aligned} & 28 / 88 \\ & (31 \%) \end{aligned}$ | $\begin{aligned} & 11 / 88 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 13 / 87 \\ & (14 \%) \end{aligned}$ | $\begin{aligned} & 12 / 87 \\ & (13 \%) \end{aligned}$ |
| La |  |  |  |  |  | $\begin{aligned} & 22 / 88 \\ & (25 \%) \end{aligned}$ | $\begin{aligned} & 25 / 87 \\ & (28 \%) \end{aligned}$ | $\begin{aligned} & 22 / 87 \\ & (25 \%) \end{aligned}$ |
| Po |  |  |  |  |  |  | $\begin{aligned} & 56 / 87 \\ & (64 \%) \end{aligned}$ | $\begin{aligned} & 62 / 87 \\ & (71 \%) \end{aligned}$ |
| Ku |  |  |  |  |  |  |  | $\begin{aligned} & 57 / 87 \\ & (65 \%) \end{aligned}$ |

Again, the same picture as before emerges (see Figure 16):

- Sangla, Nichar, and Kalpa form a clear grouping,
- with Ropa closely associated.
- Poo, Kuno, and Nako form another grouping, possibly somewhat less close than the Sangla group.
- Finally, Chitkul and Labrang show greater affinity to the Sangla group than to the Nako group, but are distant from both. At the same time, Chitkul and Labrang are equally-or in some instances more-distant from each other as they are individually from the Sangla group.
Since Swadesh lists are often used in this kind of lexicostatistical investigation, summary statistics for all Swadesh list items in the questionnaire ( 88 concepts) are shown in Table 48, and in Table 49 we show corresponding statistics for the 25 concepts used in the questionnaire from the 40 -item globally most stable Swadesh subset defined by Holman et al. (2008). If anything, the Swadesh list comparison ties Ropa closer to the Sangla group. Otherwise, nothing substantial changes.

TABLE 47 Summary statistics for the full lexical questionnaire

|  | $N i$ | $K a$ | Ro | Ch | La | Po | Ки | $N a$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sa | $\begin{aligned} & 111 / 154 \\ & (72 \%) \end{aligned}$ | $\begin{aligned} & 116 / 155 \\ & (74 \%) \end{aligned}$ | $\begin{aligned} & 96 / 155 \\ & (61 \%) \end{aligned}$ | $\begin{aligned} & 66 / 152 \\ & (43 \%) \end{aligned}$ | $\begin{aligned} & 45 / 153 \\ & (29 \%) \end{aligned}$ | $\begin{aligned} & 13 / 153 \\ & (8 \%) \end{aligned}$ | $\begin{aligned} & 16 / 149 \\ & (10 \%) \end{aligned}$ | $\begin{aligned} & 16 / 155 \\ & (10 \%) \end{aligned}$ |
| $N i$ |  | $\begin{aligned} & 103 / 153 \\ & (67 \%) \end{aligned}$ | $\begin{aligned} & 87 / 153 \\ & (56 \%) \end{aligned}$ | $\begin{aligned} & 56 / 151 \\ & (37 \%) \end{aligned}$ | $\begin{aligned} & 39 / 151 \\ & (25 \%) \end{aligned}$ | $\begin{aligned} & 11 / 152 \\ & (7 \%) \end{aligned}$ | $\begin{aligned} & 14 / 148 \\ & (9 \%) \end{aligned}$ | $\begin{aligned} & 14 / 153 \\ & (9 \%) \end{aligned}$ |
| $K a$ |  |  | $\begin{aligned} & 100 / 154 \\ & (64 \%) \end{aligned}$ | $\begin{aligned} & 65 / 15^{2} \\ & (42 \%) \end{aligned}$ | $\begin{aligned} & 42 / 153 \\ & (27 \%) \end{aligned}$ | $\begin{aligned} & 11 / 152 \\ & (7 \%) \end{aligned}$ | $\begin{aligned} & 15 / 149 \\ & (10 \%) \end{aligned}$ | $\begin{aligned} & 14 / 154 \\ & (9 \%) \end{aligned}$ |
| Ro |  |  |  | $\begin{aligned} & 60 / 151 \\ & (39 \%) \end{aligned}$ | $\begin{aligned} & 52 / 15^{2} \\ & (34 \%) \end{aligned}$ | $\begin{aligned} & 19 / 152 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 21 / 148 \\ & (14 \%) \end{aligned}$ | $\begin{aligned} & 20 / 154 \\ & (12 \%) \end{aligned}$ |
| Ch |  |  |  |  | $\begin{aligned} & 45 / 150 \\ & (30 \%) \end{aligned}$ | $\begin{aligned} & 14 / 151 \\ & (9 \%) \end{aligned}$ | $\begin{aligned} & 16 / 148 \\ & (10 \%) \end{aligned}$ | $\begin{aligned} & 16 / 151 \\ & (10 \%) \end{aligned}$ |
| La |  |  |  |  |  | $\begin{aligned} & 26 / 150 \\ & (17 \%) \end{aligned}$ | $\begin{aligned} & 31 / 149 \\ & (20 \%) \end{aligned}$ | $\begin{aligned} & 27 / 152 \\ & (17 \%) \end{aligned}$ |
| Po |  |  |  |  |  |  | $\begin{aligned} & 97 / 149 \\ & (65 \%) \end{aligned}$ | $\begin{aligned} & 105 / 15^{2} \\ & (69 \%) \end{aligned}$ |
| Ки |  |  |  |  |  |  |  | $\begin{aligned} & 97 / 149 \\ & (65 \%) \end{aligned}$ |



FIGURE 16 Preliminary grouping of the nine investigated KST varieties (branch lengths are not significant)

TABLE 48 Summary statistics for all Swadesh list items

|  | $N i$ | Ka | Ro | Ch | La | Po | Ки | $N a$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sa | $\begin{aligned} & 65 / 87 \\ & (74 \%) \end{aligned}$ | $\begin{aligned} & 64 / 87 \\ & (73 \%) \end{aligned}$ | $\begin{aligned} & 59 / 87 \\ & (67 \%) \end{aligned}$ | $\begin{aligned} & 33 / 86 \\ & (38 \%) \end{aligned}$ | $\begin{aligned} & 28 / 86 \\ & (32 \%) \end{aligned}$ | $\begin{aligned} & 9 / 86 \\ & (10 \%) \end{aligned}$ | $\begin{aligned} & 10 / 83 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 11 / 87 \\ & (12 \%) \end{aligned}$ |
| Ni |  | $\begin{aligned} & 58 / 86 \\ & (67 \%) \end{aligned}$ | $\begin{aligned} & 53 / 86 \\ & (61 \%) \end{aligned}$ | $\begin{aligned} & 28 / 86 \\ & (32 \%) \end{aligned}$ | $\begin{aligned} & 25 / 85 \\ & (29 \%) \end{aligned}$ | $\begin{aligned} & 7 / 86 \\ & (8 \%) \end{aligned}$ | $\begin{aligned} & 9 / 83 \\ & (10 \%) \end{aligned}$ | $\begin{aligned} & 9 / 86 \\ & (10 \%) \end{aligned}$ |
| Ka |  |  | $\begin{aligned} & 58 / 86 \\ & (67 \%) \end{aligned}$ | $\begin{aligned} & 31 / 86 \\ & (36 \%) \end{aligned}$ | $\begin{aligned} & 25 / 86 \\ & (29 \%) \end{aligned}$ | $\begin{aligned} & 7 / 85 \\ & (8 \%) \end{aligned}$ | $\begin{aligned} & 9 / 83 \\ & (10 \%) \end{aligned}$ | $\begin{aligned} & 9 / 86 \\ & (10 \%) \end{aligned}$ |
| Ro |  |  |  | $\begin{aligned} & 31 / 85 \\ & (36 \%) \end{aligned}$ | $\begin{aligned} & 33 / 85 \\ & (38 \%) \end{aligned}$ | $\begin{aligned} & 12 / 85 \\ & (14 \%) \end{aligned}$ | $\begin{aligned} & 13 / 82 \\ & (15 \%) \end{aligned}$ | $\begin{aligned} & 14 / 86 \\ & (16 \%) \end{aligned}$ |
| Ch |  |  |  |  | $\begin{aligned} & 31 / 85 \\ & (36 \%) \end{aligned}$ | $\begin{aligned} & 10 / 85 \\ & (11 \%) \end{aligned}$ | $\begin{aligned} & 10 / 83 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 11 / 85 \\ & (12 \%) \end{aligned}$ |
| La |  |  |  |  |  | $\begin{aligned} & 15 / 84 \\ & (17 \%) \end{aligned}$ | $\begin{aligned} & 17 / 83 \\ & (20 \%) \end{aligned}$ | $\begin{aligned} & 16 / 85 \\ & (18 \%) \end{aligned}$ |
| Po |  |  |  |  |  |  | $\begin{aligned} & 57 / 83 \\ & (68 \%) \end{aligned}$ | $\begin{aligned} & 62 / 85 \\ & (72 \%) \end{aligned}$ |
| Ku |  |  |  |  |  |  |  | $\begin{aligned} & 58 / 83 \\ & (69 \%) \end{aligned}$ |

### 5.8 Reflections on the Methodology

In this chapter, we have made a systematic comparison of nine KST varieties in order to throw some light on the genealogical classification of these underdescribed linguistic systems. The comparison has focused on the lexicon, which was investigated using an automatic, computational and purely quantitative method inspired by recent work on lexicostatistics and dialectometry, combined with traditional linguistic analysis and reasoning.

In Figure 16 we show the subgrouping of these nine KST varieties resulting from applying the method to our lexical data.

As has been pointed out a number of times above, the automatic comparison of lexical items often failed to pick out lexical item identities among varieties which were glaringly obvious to the linguist. At this point we should remind ourselves that this kind of computer program is simply a tool among many others in the linguist's toolbox. Correctly used, it can be very helpful and save a lot of effort. In the present investigation it has turned out to be quite helpful to have an automated way of quickly calculating similarities among the language varieties under scrutiny, not least as a "generator" of new research questions.

|  | $N i$ | Ka | Ro | Ch | La | Po | Ки | $N a$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sa | $\begin{aligned} & 20 / 25 \\ & (80 \%) \end{aligned}$ | $\begin{aligned} & 22 / 25 \\ & (88 \%) \end{aligned}$ | $\begin{aligned} & 20 / 25 \\ & (80 \%) \end{aligned}$ | $\begin{aligned} & 11 / 25 \\ & (44 \%) \end{aligned}$ | $\begin{aligned} & 11 / 25 \\ & (44 \%) \end{aligned}$ | $\begin{aligned} & 3 / 25 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 3 / 25 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 3 / 25 \\ & (12 \%) \end{aligned}$ |
| Ni |  | $\begin{aligned} & 19 / 25 \\ & (76 \%) \end{aligned}$ | $\begin{aligned} & 19 / 25 \\ & (76 \%) \end{aligned}$ | $\begin{aligned} & 11 / 25 \\ & (44 \%) \end{aligned}$ | $\begin{aligned} & 11 / 25 \\ & (44 \%) \end{aligned}$ | $\begin{aligned} & 3 / 25 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 3 / 25 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 3 / 25 \\ & (12 \%) \end{aligned}$ |
| Ka |  |  | $\begin{aligned} & 18 / 25 \\ & (72 \%) \end{aligned}$ | $\begin{aligned} & 9 / 25 \\ & (36 \%) \end{aligned}$ | $\begin{aligned} & 10 / 25 \\ & (40 \%) \end{aligned}$ | $\begin{aligned} & 3 / 25 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 3 / 25 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 3 / 25 \\ & (12 \%) \end{aligned}$ |
| Ro |  |  |  | $\begin{aligned} & 10 / 25 \\ & (40 \%) \end{aligned}$ | $\begin{aligned} & 14 / 25 \\ & (56 \%) \end{aligned}$ | $\begin{aligned} & 4 / 25 \\ & (16 \%) \end{aligned}$ | $\begin{aligned} & 4 / 25 \\ & (16 \%) \end{aligned}$ | $\begin{aligned} & 4 / 25 \\ & (16 \%) \end{aligned}$ |
| Ch |  |  |  |  | $\begin{aligned} & 11 / 25 \\ & (44 \%) \end{aligned}$ | $\begin{aligned} & 4 / 25 \\ & (16 \%) \end{aligned}$ | $\begin{aligned} & 4 / 25 \\ & (16 \%) \end{aligned}$ | $\begin{aligned} & 4 / 25 \\ & (16 \%) \end{aligned}$ |
| La |  |  |  |  |  | $\begin{aligned} & 5 / 25 \\ & (20 \%) \end{aligned}$ | $\begin{aligned} & 5 / 25 \\ & (20 \%) \end{aligned}$ | $\begin{aligned} & 5 / 25 \\ & (20 \%) \end{aligned}$ |
| Po |  |  |  |  |  |  | $\begin{aligned} & 19 / 25 \\ & (76 \%) \end{aligned}$ | $\begin{aligned} & 21 / 25 \\ & (84 \%) \end{aligned}$ |
| Ku |  |  |  |  |  |  |  | $\begin{aligned} & 19 / 25 \\ & (76 \%) \end{aligned}$ |

It has helped to provide some answers and in the process proved its worth. Given that one accepts lexicostatistics using Swadesh-style core vocabulary lists as producing valid results, the refinement of this method that we have presented here seems to be a step in the direction of making this methodology more useful for teasing out the relationships among closely related language varieties.

## 6 Results: Grammatical Features

In this section some preliminary observations about grammatical phenomena in the investigated KST varieties will be made on the basis of the noun phrase and sentence items in the questionnaire, as well as some additional grammatical data on reflexive and possessive pronouns collected during the fieldwork.

### 6.1 Reflexive and Possessive Pronominal Forms

In this section we will examine the forms as well as the composition of the reflexive pronominals in the KST varieties. In all the KST varieties examined
here, the reflexive pronouns inflect for number and person of their coreferential antecedents. This is illustrated below with data from Sangla and Nako.

| Sa | may-o gas ay-u sa-k | 'In the dream I killed myself.' |
| :---: | :---: | :---: |
|  | may-o ka-s kan-u sa-n | 'In the dream you ( NH ) killed yourself.' |
|  | do-s an-u-i lo-kjo | 'He said to himself.' |
|  | do-gor-s ane-go:-n(u) taytay | 'They looked at themselves.' |

Na mà=su mà-ray=la tá(e) 'I observed myself.'
màfak=su mà $\int a k-r a y=l a ~ t a ́ e ~ ' W e ~ o b s e r v e d ~ o u r s e l v e s . ' ~$

vã:k
$k^{h} o ́=s u k^{h} r a ́ y=l a ~ t a ́ e-v a ̃: k$
$k^{h o ́ v a t=s u} k^{h}$ óvat-ray=la
táe-vã:k
$k^{h}$ ó $k^{h}$ óy=la táe-vã:k 'He observed you.' (indirect knowledge)

The composition of the reflexive pronoun is, however, not the same in all KST varieties. In Sangla, Kalpa, Nichar, and Ropa the reflexive form is the same as the non-nominative personal pronominal forms in the first and second persons (for example, ay 'my/me', kan 'your/to you' in Sangla), to which the dative case marker is suffixed. In the third person the third person non-nominative anaphoric pronoun ${ }^{10}$ an, functions as the reflexive pronoun. This can be seen by comparing the examples of Sangla reflexives, provided above, with the examples of possessive pronouns in Sangla, provided below (see also Chapter 2):
$\begin{array}{lll}\text { Sa } \begin{array}{ll}\text { ay la: } & \text { 'my shadow' } \\ & \text { kin bapu }\end{array} & \text { 'your father' } \\ & \text { an gas-o: } & \text { 'his (own) clothes' } \\ & \text { do-go:- } \text { g gas-o: } & \text { 'their (someone else's) clothes' }\end{array}$
The reflexive pronominal formation in Nichar, Kalpa, and Ropa is the same as described here for Sangla, and the forms ay, kan, kin, an for 1SG, 2SG.NH, 2SG.H, 3SG, respectively, are also the ones used in Nichar, Kalpa, and Ropa.

Distinct from this, in the Poo, Kuno and Nako varieties, the base of the reflexive forms is the nominative form of the pronouns. The reflexive pronoun is

[^92]formed in all three varieties by adding the suffix -ray to the nominative forms of the personal pronouns. See the Nako examples above and Chapter 3.

Labrang exhibits some similarity to the Sangla group in the reflexive pronouns, in that the non-nominative pronominal form functions also as the reflexive pronoun in the first person. It is $a \eta$ in Labrang, as in the Sangla group. However, the second and third person reflexive pronoun ray—not similar to the other pronouns in Labrang-is shared with neither the Sangla group nor the Nako group, although it could be related to the reflexivizing suffix -ray of the Nako group and/or reflexive ray 'self' of Modern Tibetan.

Chitkul is distinct from all the other varieties in its reflexive pronouns. In Chitkul the first person reflexive is the same as the nominative pronoun (ga). Like in Labrang, a special reflexive pronoun-e-is used in both second and third person, distinct from the non-reflexive second and third person pronouns in this variety.

To summarize this section, as in the case of the personal pronouns, also with regard to reflexive pronouns the KST varieties form two groups: Sangla, Nichar, Kalpa, and Ropa form one group and Poo, Kuno and Nako form the other group. The reflexive form in the Sangla group is the non-nominative forms of pronouns, but in the Nako group it is the nominative pronominal form which is the base form(s) for reflexives, to which a reflexive affix is suffixed. Labrang and Chitkul do not clearly belong to one or to the other group, but also do not form a third group together.

### 6.2 Adjective-Noun Order

The order of constituents within the noun phrase in most of the investigated varieties seems to be Adjective-Noun. The exception is Nako, where the normal constituent order is Noun-Adjective. This is illustrated here with examples from Kinnauri and Navakat (see also Chapters 2 and 3):

| Kinnauri | Navakat |
| :--- | :--- |
| mot hes th ${ }^{h}$ aך 'fat boy' | tú: dùmpo 'fat boy' |
| $u f k$ kim 'old house' | kíta:p tápo 'thick book' |
| fare tshetshats 'beautiful girl' | tiva kítpu 'happy child' |

### 6.3 Some Preliminary Observations about the Grammatical Structure of KST Varieties

Based on the sentences provided in the questionnaire (see Appendix 5A to this chapter), some very preliminary observations on their grammatical structure are presented below. The groupings among the KST varieties which we observed above are less clear when we consider the linguistic features which we examine on the basis of these sentences, perhaps because the grammatical features that we investigate are more abstract and change more slowly than the lexicon. It is still worthy of note that many of these varieties show different and noncognate endings for the same grammatical feature.

Case markers in nouns: All KST varieties have ergative and dative markers, although different markers are used in different varieties. The ergative markers in all varieties has some form of $-(\partial) s$ or $-t f i$ or $-s u$. At least $-(\partial) s$ and $-s u$ may be related. The dative markers are -la (SG)/-nu (PL) or -ra or -u.

Plural markers in nouns: All varieties seem to have $-a$ as a nominal plural marker. The plural marker precedes the case marker. Personal pronouns have distinct plural markers (see above).

Constituent order: The order of sentence constituents in all varieties is SOV. As we saw above, the noun phrase constituent order is Adj-Noun except in Nako, where we find the reverse order.

Verbal morphology: It seems that future and past tense markers are suffixed to the verb. In the case of Kalpa (future), Nichar/Poo/Chitkul (past) tense markers are similar to those in Kinnauri. In some varieties an $-\int$ occurs as the $3 . \mathrm{H}$ marker on the verb, while Nako exhibits no person or number indexing.

## $7 \quad$ KST Varieties and Their Classification

Gerard (1841) lists five Sino-Tibetan varieties spoken in Kinnaur ("Koonawur"): (1) "Milchan or common Koonawuree"; (2) "T,heburskud"; (3) the dialect spoken in "Lubrung" and "Kanum"; (4) the dialect spoken in "Leedung"; and (5) "B,hoteea or Tartar". According to this account, while Milchan and B,hoteea and, possibly also, T,heburskud are distinct languages ("tongues"), the varieties spoken in Lubrung/Kanum and Leedung are "dialects" of Milchan.

Gerard (1842) provides a word list (containing approximately 1,19o entries ${ }^{11}$ ), 98 direct-elicited phrases and clauses, and short descriptive notes on nouns and verbs in three KST varieties: Milchan, T,heburskud and B,hoteea/Tartar. The

[^93]word list contains primarily nouns, adjectives, numerals and infinitive forms of verbs. There is also a word list of "Shoomchoo" (246 entries).

Cunningham (1844) adds Kinnauri Pahari (speech of the "Kohlis or Chumars" to use Cunningham's terminology) to the list of "tongues"/ "dialects" mentioned by Gerard (1842), and provides a short comparative word list of "Milcháng or common", "Tibberkad", "Chamangee" (Kinnauri Pahari) and "Bhotee of Pitti, Hangrang, Rungchung, \&c". In total there are 110 entries, most for Milchan and Bhotee and relatively fewer for the other two (Cunningham 1844: 225-228).

Bailey (1909: 661-662) classifies Kinnauri into four dialects: (i) "Kanauri proper", (ii) "Lower Kanauri", (iii) "Thĕbör skad"" and (iv) the variety spoken in Rakcham and Chitkul. The only difference between Kanauri proper and Lower Kanauri, according to Bailey, is in the lexicon-where Lower Kanauri has borrowed many lexical items from the neighboring Indo-Aryan languages. He regards the variety spoken in Chitkul and Rakcham as a distinct dialect of Kanauri, and classifies the KST varieties of Upper Kinnaur as Tibetan (Bailey 1909: 662). This information is also provided in later work by Bailey (1910), and is also included in the 1981 Indian Census Handbook (p. 9).

More recent accounts of the linguistic situation in Kinnaur extend these older accounts and recognize approximately eight languages indigenous to the region. Common to these accounts-e.g., Chamberlain et al. (1998), Huber (2007), and Saxena (2011) - is that they essentially rely on the Ethnologue (Eberhard et al. 2021 and earlier editions) for this assessment. ${ }^{12}$

The seven Sino-Tibetan languages recognized by the Ethnologue and also other sources (e.g., Glottolog; Hammarström et al. 2O20) as spoken in Kinnaur are described in Table 50. Genealogically, these languages are generally classified under two different subbranches of Sino-Tibetan, with Bhoti Kinnauri and Tukpa classified as Tibetic and the other five languages as West Himalayish.

The Ethnologue places all seven languages under the subbranch Kinauri (earlier Kanauri), which in other respects corresponds to West Himalayish or Tibeto-Kanauri in more accepted classifications among experts on SinoTibetan languages (e.g., Bradley 1997, 2002; LaPolla 2006, 2017a; Thurgood 2017), which in their turn largely coincide with Benedict (1972). The placement of the Tibeto-Kanauri (or [West] Himalayish) subbranch among the SinoTibetan languages varies somewhat, on the other hand. In the most common classification, (West) Himalayish forms a sister branch of Bodic under Bodish (Benedict 1972; Bradley 1997, 2002; Hyslop 2014), whereas LaPolla (2006,

[^94]TABLE 50 KST varieties according to the Ethnologue

| $\begin{aligned} & \text { Name (ISO 639-3 } \\ & \text { code) } \end{aligned}$ | Alternative names / village(s) (tahsil) where spoken in Kinnaur |
| :---: | :---: |
| Jangshung (jna) | Jangrami, Zangram, Zhang-Zhung, Jangiam, Thebor, Thebör Skadd, Thebarskad, Central Kinnauri / Jangi, Lippa, Asrang (Morang) |
| Kinnauri (kfk) | Kinnaura Yanuskad, Kanoreunu Skad, Kanorug Skadd, Lower Kinnauri, Kinori, Kinner, Kanauri, Kanawari, Kanawi, Kunawari, Kunawur, Tibas Skad, Kanorin Skad, Kanaury Anuskad, Koonawure, Malhesti, Milchanang, Milchan, Milchang / From Chaura to Sangla and north along Satluj River to Morang, upper Ropa valley villages. |
| Kinnauri, Bhoti (nes) | Nyamskad, Mnyam, Myamskad, Myamkat, Nyamkat, BudKat, Bod-Skad, Sangyas, Sangs-Rgyas, Bhotea of Upper Kinnauri / Nisang [Nesang] and possibly also Kuno and Charang (Morang); Poo (Poo) |
| Kinnauri, Chitkuli (cik) | Chitkuli, Chitkhuli, Tsíhuli, Tsitkhuli, Kinnauri, Kanauri, Thebarskad / Rakcham, Chitkul (Sangla) |
| Shumcho (scu) | Sumchu, Sumtsu, Shumcu, Thebor, Thebör Skadd, Thebarskad, Central Kinnauri, Sumcho / Kanam, Labrang, Spilo, Shyaso, Taling, Rushkaling (Poo) |
| Sunam (ssk) | Sungam, Sungnam, Thebor, Thebör Skadd, Thebarshad, Central Kinnauri, Sangnaur / Sunam (Poo) |
| Tukpa (tpq) | Nesang / Nesang, Charang, Kunnu [Kuno] (Morang) |

2017a) and Thurgood (1984, 1985) place West Himalayish and Tibetic further apart in the family tree, under different primary branches of Sino-Tibetan (see Figure 17). ${ }^{13}$

Based on our results, we could then classify Sangla, Nichar, Kalpa, and possibly Ropa as the language (Lower) Kinnauri (kfk), Chitkul as Chhitkuli Kinnauri (cik), and Labrang as Shumcho (scu). Overall, the lexical comparison made

13 While the "Rung" label has been used at least since Thurgood (1984), its actual content has varied, it is not generally accepted among Sino-Tibetanists, and Thurgood (2017:24f.) himself seems to have abandoned it (although this is not completely clear from the presentation in Thurgood 2017). However, the fact that it is presented in a handbook-style publication such as Thurgood and LaPolla (2017) motivates its inclusion here.

figure 17 Placement of the West Himalayish (WH) and Tibetic subbranches among the Sino-Tibetan languages according to the most common view (left) and according to LaPolla (2006, 2017a) (right)
here shows Poo and Nako to be slightly closer to each other than either is to Kuno, but the differences are small and with some vocabulary subsets actually go the other way (e.g., Tables 42,44 , and 45 ). If we are to speak of languages rather than a dialect continuum, these results indicate that we should recognize three languages or one language, but not two. The Nako group is consistently different from the Sangla group by a large margin in all cases, and thus the results shown here suggest a classification of these three varieties-Poo, Kuno, and Nako-as Tibetic (rather than West Himalayish) languages or varieties, namely as Bhoti Kinnauri (nes), completely in agreement with the traditional view (see Figure 18).

The Nako group is certainly distant enough from the other varieties for this to be conceivable. Further, all three varieties of the Nako group exhibit the probative lexical features of Tibetic, namely the form of the personal pronouns for second person singular (Navakat $k^{h j ø ́ t)}$ ) and third person singular ( $\left.k^{h} o ́\right) ~($ see Table 59 in Appendix 5A), plus the numeral 'seven' (dùn, dỳn) (Thurgood 2017:11). Further, the finite verb forms in Kinnauri and Navakat differ more or less along the lines discussed by DeLancey (2014), the former exhibiting an "archaic" inflectional system, conveying information about the argument structure of its clause, while in the latter we find a "creoloid" structure, which encodes only discourse-grounding information. In this sense, too, Navakat is a typical Tibetic language, and not a West Himalayish one (DeLancey 2014:58ff.).


FIGURE 18 Resulting lower-level classification of the investigated KST varieties (branch lengths are not significant)

Also, going back to the more detailed descriptions of Kinnauri and Navakat in Chapters 2 and 3, we note some striking differences between the respective linguistic systems (Table 51). In all these cases, as also mentioned in Chapter 3, Navakat is similar to Modern Tibetan, exemplified here by Lhasa Tibetan (Bell 1939; DeLancey 2017b).
table 51 A comparison of Kinnauri and Navakat with (Lhasa) Tibetan

| Lhasa Tibetan | Navakat | Kinnauri |
| :--- | :--- | :--- |

Phonetics: Is there phonemic tone?

| Yes | Yes | No |
| :--- | :--- | :--- |

## Case markers

| ERG $=$ INS case marker? |  |  |
| :--- | :--- | :--- |
| Yes | No. $-s u[$ ERG]; $d a \eta[$ INS $]$ | Yes. It is $-s$ |
| Is the dat marker $l a ?$ |  |  |
| Yes | Yes | No. It is $-u,-n(u),-p a \eta$ |

TABLE 51 A comparison of Kinnauri and Navakat with (Lhasa) Tibetan (cont.)

| Lhasa Tibetan | Navakat | Kinnauri |
| :--- | :--- | :--- |
| Is the Poss marker (-)ki? |  |  |
| Yes | Yes |  |
| Are the Loc markers $r u, n a ?$ |  |  |
| No. LOC = DAT $(\mathrm{C}-l a, \mathrm{~V}-r)$ | Yes | No. It is $-0,-n o,-r$ |
| Is the case marking system consistently ergative? |  |  |
| No | Insufficient data | Yes |

## Honorificity

Are there distinct honorific and non-honorific verb stems?

Yes, for a set of verbs Yes, for a set of verbs No

Is honorificity marked on the verb with an inflectional ending?

| Yes | No, exception: some verbal Yes |
| :--- | :--- |
| categories (e.g. imperative) |  |
|  | distinguish $\mathrm{H} / \mathrm{NH}$ |

Are there distinct honorific and non-honorific second person pronouns?

| Yes. | Yes. | Yes. |
| :---: | :---: | :---: |
| khyedrang [2SG.H]; | $k^{h}$ Óy [2SG.H]; | ki [2SG.H]; |
| khyedranggnyis [2DU.H]; | $k^{h}$ ónfak, $k^{h}$ óydzak [2PL.H]; | kifl [2DU.H]; |
| khyedrangtsho [2PL.H]; | $k^{h}$ jót [2SG.NH]; | kino [2PL.H]; |
| khyodrang [2SG.NH]; | $k^{h}$ jǿtvat [2PL.NH] | $k a[2 \mathrm{SG} . \mathrm{NH}]$; |
| khyodranggnyis [2DU.NH]; |  | kanif [2DU.NH]; |
| khyodrangtsho [2PL.NH] |  | kano, kanego [2PL.NH] |

TABLE 51 A comparison of Kinnauri and Navakat with (Lhasa) Tibetan (cont.)

| Lhasa Tibetan | Navakat | Kinnauri |
| :--- | :--- | :--- |

## Pronouns

Is there an INCL-EXCL distinction in the first person pronoun?

| Yes. $\eta \bar{a}=$ tsho $(\mathrm{EXCL}) ;$ | Yes. màfak, nèt $(\mathrm{EXCL}) ;$ | Yes. niyy (EXCL); |
| :--- | :--- | :--- |
| ya=rang=tsho (INCL) | òn (INCL) | kifa (INCL) |

Are there distinct nominative and non-nominative pronominal forms?

No No | Yes. It has distinct forms |  |
| :--- | :--- |
|  | for 1SG \& 3.ANA pro- |
|  | nouns: $g$ a $[1 \mathrm{SG} . \mathrm{NOM}] ;$ |
|  | $a \eta[1 \mathrm{SG} . \mathrm{NNOM}] ;$ do, no |
|  | $[3 \mathrm{SG} . \mathrm{NOM}] ;$ an $[3 \mathrm{SG} . \mathrm{ANA}]$ |

How are reflexive pronouns formed?

One reflexive pronoun for Personal pronoun + -ray The non-nominative pro-
all persons: ray 'self' noun

Constituent ordering: Adj, $N$

| N -Adj | $\mathrm{N}-$ Adj | Adj-N |
| :--- | :--- | :--- |

## Verb inflection

Are there different verb stems to mark tense/aspect and/or imperative?

| Yes $\quad$ Yes, in some cases | Only in one case: the verb <br> 'come' has a distinct imper- <br> ative verb form $(d ; i)$ |
| :--- | :--- |

TABLE 51 A comparison of Kinnauri and Navakat with (Lhasa) Tibetan (cont.)

| Lhasa Tibetan | Navakat | Kinnauri |
| :--- | :--- | :--- |

Are tense and aspect two distinct inflectional grammatical categories?

| No | No. There are fusional <br> grammatical morphemes <br> signalling tense and evi- |  |
| :--- | :--- | :--- |
|  | dentiality. |  |

Is there a subject indexing marker?

No. There is an egophoric
system combined with evidentiality

No. There is an egophoric Yes system combined with evidentiality

Negation: Is the negative marker sensitive to tense/aspect?

| Yes. $m a-($ PFV, FUT $)$ and <br> $m i-(\mathrm{IPFV})$ | Yes. $m a-$ - (PST) and $m i-\quad$ No. $m a$ - occurs in all tenses <br> $(\mathrm{NPST})$ |
| :--- | :--- |

## How are imperatives formed?

| The basic imperative is equivalent to the present or perfect verb root, sometimes with vowel changes (e.g. $a>o$ ). To this can be added various endings reflecting degree of honorificity, e.g. -ronay, -rotfe ( H ) and $-\int i(\mathrm{NH})$. | A small set of verbs have distinct $\mathrm{H} / \mathrm{NH}$ forms, including the imperatives in this verb set. Apart from this, the н.Imp form is formed by adding the suffix -rotfi to the verb stem. The nh.imp forming strategies: (i) bare verb form; (ii) a change in the stem vowel ( $a$ or $e>o$ ); (iii) $-i$ or $-e$ is suffixed to the verb; (iv) lengthening of the stem vowel | Only in one case: the verb 'come' has a distinct imperative verb form ( $d_{j} i$ ). In all other cases, one of the following suffixes is added to the verb: $\begin{aligned} & -r i n:-i n /-n:-i t / /-t f:-r a:-o: \\ & -u: \emptyset \end{aligned}$ |
| :---: | :---: | :---: |

TABLE 51 A comparison of Kinnauri and Navakat with (Lhasa) Tibetan (cont.)

| Lhasa Tibetan | Navakat | Kinnauri |
| :--- | :--- | :--- |

How are prohibitives formed?
$m a$ - is prefixed to the
imperative form

NHON: $m a$ - is prefixed to the bare verb stem. HON: V-ro mapèt

In conclusion, here we have seen that the two KST varieties examined in this monograph-Kinnauri and Navakat, differ from each other at the phonological, lexical as well as at the grammatical level. In almost all the cases where the two languages differ, Navakat shows affinity with Tibetan, confirming the conclusions of the vocabulary comparison described in Section 5 above.

## Appendix 5A: Questionnaire Items and Vocabulary Comparison Tables

## 5A. $1 \quad$ Questionnaire Items ${ }^{14}$

5A.1.1 Lexical Items
In the following list, all 237 questionnaire concepts are listed, and the 157 items used for the lexicostatistical investigation reported on in Section 5 of this chapter are shown in italics. For the latter set, Swadesh list items (88 concepts) are marked by their Swadesh list number, and Swadesh items in the set of 40 globally most stable items identified by Holman et al. (2008) are marked by an asterisk after the number ( 25 concepts).

| $I / 1^{*}$ | MATERNAL GRANDFATHER | ANIMAL/44 |
| :---: | :---: | :---: |
| $Y O U(S G H) / 2$ | MATERNAL GRANDMOTHER | GOAT |
| YOU (SG-H)/2* | PATERNAL GRANDFATHER | BIRD/46 |
| $(S) H E / 3$ | PATERNAL GRANDMOTHER | $D O G(F, M) / 47^{*}$ |
| $W E(I N C L) / 4 *$ | WOMAN/36 | CAT (F; M ) |
| WE (EXCL)/4 | MAN (ADULT MALE)/37 | SHEEP |
| YOU (PLH)/5 | MAN (HUMAN BEING)/38 | SNAKE/49 |
| YOU (PL-H)/5 | CHILD/39 | LAMB |
| THEY/6 | DAUGHTER | TREE $/ 51^{*}$ |
| THIS | SON | FOREST/52 |
| THAT | WIFE/40 | HEN |
| HERE | HUSBAND/41 | FRUIT/54 |
| THERE | MOTHER/42 | SEED/55 |
| WHO/11 | FATHER/43 | LEAF/56* |
| WHAT/12 | OLDER SISTER | ROOT/57 |
| WHERE/13 | YOUNGER SISTER | BARK |
| WHEN/14 | OLDER BROTHER | BEAUTIFUL A. |
| HOW/15 | YOUNGER BROTHER | GRASS/60 |
| NOT | MATERNAL AUNT | ROPE/61 |
| ALL | PATERNAL AUNT | CAT (M, F) |
| MANY | MATERNAL UNCLE | MEAT/63 |
| SOME | PATERNAL UNCLE | BLOOD/64* |
| GIRL | YAK | BONE $/ 65^{*}$ |
| BOY | YAK (FEMALE) |  |

14 Hindi, which is the official state language of Himachal Pradesh, is generally understood by the people of Kinnaur. During data collection, when needed, Hindi was used as the contact language, as it is more widely understood than, e.g., English.

| MILK | DIG V. | WIND/163 |
| :---: | :---: | :---: |
| EGG/67 | SWIM V. | SNOW/164 |
| FOOD | FLYV. | ICE |
| TAIL/69 | WALK V. | SPRING (SEASON) |
| SUGAR | COMEV. | FIRE/167* |
| FACE | LIE V. | MOUNTAIN/171* |
| $\operatorname{HAIR}(H E A D) / 7{ }^{*}$ | SIT V. | RED A./172 |
| HEAD/72 | STAND V. | GREEN A./173 |
| EAR/73* | FALL V. | YELLOW A./174 |
| EYE/74* | GIVE V. | WHITE A./175 |
| NOSE $/ 75$ * | HOLD V. | BLACK A./176 |
| MOUTH/76 | WASH V. | NIGHT/177* |
| тоотн/77* | WIPE V. | DAY/178 |
| FOOT/80 | PULLV. | YEAR/779 |
| LEG | PUSHV. | WARM A./ı80 |
| HAND $/ 83$ * | THROW V. | COLD A./181 |
| BUTTER | TIE V. | SMALL A./32 |
| GLACIER | SAY V. | BIG A./27 |
| VILLAGE | SING V. | LONG A./28 |
| BREAST | PLAYV. | NEW A./183* |
| HEART | FLOWV. | OLD A./184 |
| DRINK V. | GOLD | GOOD A./185 |
| EAT V. | SILVER | BAD A./186 |
| BITE V. | COPPER | STRAIGHT A./189 |
| SUCKV. | SUN/147* | ROUND A./190 |
| LAUGHV. | MOON/148 | WET A./194 |
| SEEV. | STAR/149* | DRY A./195 |
| HEAR V. | WATER/150* | NEAR A. |
| KNOWV. | RAIN/151 | FARA. |
| THINKV. | RIVER/152 | RIGHTA. |
| SMELLV. | POND; LAKE | LEFTA. |
| FEAR V. | IRON | ONE/22* |
| SLEEP V. | SALT/155 | TWO/ 23 * |
| LIVE V. | STONE/156* | THREE/24* |
| DIE V. | SUMMER | FOUR/25 |
| KILL V. | WINTER | FIVE/26 |
| FIGHTV. | EARTH | SIX |
| HUNTV. | CLOUD/160 | SEVEN |
| Hit V. | AUTUMN | EIGHT |
| cut V. | SKY/162 | NINE |


| TEN | THIRTY-THREE | ONE THOUSAND ONE |
| :---: | :---: | :---: |
| ELEVEN | FORTY | TODAY |
| TWELVE | FORTY-ONE | YESTERDAY |
| THIRTEEN | FIFTY | 1 DAY BEFORE Y.-DAY |
| FOURTEEN | SIXTY | 2 DAYS BEFORE Y.-DAY |
| FIFTEEN | SIXTY-ONE | 3 DAYS BEFORE Y.-DAY |
| TWENTY | SIXTY-TWO | 4 DAYS BEFORE Y.-DAY |
| TWENTY-ONE | SEVENTY | TOMORROW |
| TWENTY-TWO | SEVENTYONE | 1 DAY AFTER TOMORROW |
| TWENTY-THREE | EIGHTY | 2 DAYS AFTER TOMORROW |
| TWENTY-FOUR | EIGHTY-ONE | 3 DAYS AFTER TOMORROW |
| TWENTY-FIVE | NINETY | 4 DAYS AFTER TOMORROW |
| TWENTY-SIX | ONE HUNDRED | CARPENTER |
| THIRTY | ONE HUNDRED ONE | SINGER |
| THIRTY-ONE | FIVE HUNDRED |  |
| THIRTY-TWO | ONE THOUSAND |  |

5A.1. 2 Noun Phrases

| 'green grass' | 'fresh food' | 'water spring' |
| :--- | :--- | :--- |
| 'dry grass' | 'black hair' | 'barren land' |
| 'cold milk' | 'mountain top' | 'hot summer' |

5A.1.3 Sentences

| 'Santosh cooked food' | 'Ram saw a/the small boy today' |
| :--- | :--- |
| 'The children played and got tired' | 'Ram saw a/the small girl today' <br>  <br>  <br>  <br>  <br>  <br> 'Ram saw (the) small children today' a/the small house today' |

## 5A. 2 Vocabulary Comparison Tables

The vocabulary comparison tables are provided in full on the following pages.
In the tables we use the following notational conventions. Abbreviations (italicized in the tables) are used for the village names: Sangla $(S a)$, Nichar $(N i)$, Kalpa (Ka), Ropa (Ro), Chitkul (Ch), Labrang (La), Poo (Po), Kuno (Ku), Nako $(N a)$. Vocabulary items refer to concepts and are identified by English words (or phrases on a few occasions) in small caps. Swadesh list items are further identified by their Swadesh list number added to the end of the English word and separated from the word by a slash: $L A U G H / 100$. Items without this number do not appear in the Swadesh list. There are 88 Swadesh list concepts in
the questionnaire (see above). If a Swadesh list item is marked with an asterisk, this means that the item is in the subset of 40 Swadesh list items found to be the most stable globally by Holman et al. (2008). There are altogether 25 out of these 40 items in the questionnaire (see Section 5•7).

The longer noun and adjective tables are arranged with the English concept glosses in alphabetical order. The other tables are arranged according to other principles (semantically or by Swadesh number). In the correspondence tables, numerical indices in square brackets appear in each cell to identify the language varieties which share a form for this concept, i.e. items considered the same according to the formal principles presented above in Section 4.2. Multiple indices in the same cell are separated by slashes.

Note that since the investigations described in this chapter were conducted before undertaking the more detailed phonological analysis underlying the phonemic orthography used in Chapter 2, the transcription system used for (Sangla) Kinnauri in Tables $5^{2-59}$ below differs somewhat from that used in Chapter 2. However, in the interest of verifiability and reproducibility of results, I have elected to retain the earlier, less phonemic transcription here.
TABLE 52 Automatic comparison of kinship terms

|  | Sa [r] | $N i[2]$ | Ka [3] | Ro [4] | Ch [5] | La [6] | Po [7] | Ки [8] | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M.GRAND- <br> FATHER | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { tete } \end{aligned}$ | [ $1 / 2 / 3 / 4 / 5$ ] <br> (maperıy) <br> tete | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { (maps) tete } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { (ma:po) tete } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { (mat } f a \text { a) tete } \end{aligned}$ | $[6 / 7 / 8 / 9]$ <br> meme | $[6 / 7 / 8 / 9]$ <br> meme | $[6 / 7 / 8 / 9]$ <br> meme | [6/7/8/9] <br> mème |
| M.GRAND- <br> MOTHER | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { api } \end{aligned}$ | $\begin{aligned} & {[2]} \\ & (\text { maperəy }) \text { ai } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { (mapo) api } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { (ma:po) api } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & (\text { mat } 5 \mathrm{a}) \text { api } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { api } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { aui } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { aui } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { ávi } \end{aligned}$ |
| P.GRAND- <br> FATHER | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { tete } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { tete } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { tete } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { tete } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { tete } \end{aligned}$ | $[6 / 7 / 8 / 9]$ <br> meme | $[6 / 7 / 8 / 9]$ <br> meme | [6/7/8/9] meme | [6/7/8/9] mème |
| P.GRANDMOTHER | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { api } \end{aligned}$ | $\begin{aligned} & {[2]} \\ & \mathrm{ai} \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { api } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { api } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { api } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { api } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { avi } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { avi } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { ávi } \end{aligned}$ |
| WIFE/40 | [1/2/4/6] gone; ts ${ }^{\text {hessmi }}$ | $\begin{aligned} & {[1 / 2 / 4 / 6]} \\ & \text { gone } \end{aligned}$ | [3] govene | $[1 / 2 / 4 / 6]$ gone | [5] bore | $\begin{aligned} & {[1 / 2 / 4 / 6]} \\ & \text { gone } \end{aligned}$ | [7/9] nama | [8] t E घnmo | [7/9] náma |
| MOTHER/42 | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \\ & \text { ama, ama } \end{aligned}$ | [2] | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \\ & \text { ama } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \\ & \text { ama } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \\ & \text { ama } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \\ & \text { ama } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \\ & \text { ama } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \\ & \text { ama } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \\ & \text { áma } \end{aligned}$ |
| DAUGHTER | $\begin{aligned} & {[1 / 2 / 4]} \\ & \mathrm{t} f \mathrm{im} \varepsilon \mathrm{~d} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & t \int \operatorname{im} \varepsilon(d) \end{aligned}$ | $\begin{aligned} & {[2 / 3 / 4]} \\ & \mathrm{t} \text { fimet } \end{aligned}$ | $[1 / 2 / 3 / 4]$ <br> tfimet | [5] djuat $f$ i | $[6]$ tsamed | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { pomo } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { pomo } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { pòmo } \end{aligned}$ |
| OLDER SISTER | [1] douts | [2] dai | [3] dao | [4] at ${ }^{\text {he }}$ | [5] atfa | [6] apu | [7/8/9] a3i | [7/8/9] a3i | [7/8/9] ázi |
| Youngersis- <br> TER | [1/2/3] bats; dek ${ }^{\text {hra:ts }}$ | $\begin{aligned} & {[1 / 2 / 3]} \\ & \text { baits } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3]} \\ & \text { bats } \end{aligned}$ | $\begin{aligned} & {[4 / 5]} \\ & \text { baja } \end{aligned}$ | $\begin{aligned} & {[4 / 5]} \\ & \text { baja } \end{aligned}$ | $\begin{aligned} & {[6]} \\ & \text { bete } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { nomo } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { nomo } \end{aligned}$ | [7/8/9] nòmo ( t fun); nòmo (tfun) |
| HUSBAND/41 | [ $1 / 2 / 3 / 4 / 5$ ] <br> tf ${ }^{\text {h }}$ ว ${ }^{\text {gmi; dats }}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { dats } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { dats } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \mathrm{dat} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { dats } \end{aligned}$ | $\begin{aligned} & {[6]} \\ & \text { pruy } \end{aligned}$ | [7] dunmi | $\begin{aligned} & {[8]} \\ & \text { dakpo } \end{aligned}$ | [9] mákpa |

TABLE 52 Automatic comparison of kinship terms (cont.)

|  | $S a\left[{ }^{1}\right]$ | $N i[2]$ | Ka [3] | Ro [4] | Ch [5] | $L a[6]$ | Po [7] | $K u[8]$ | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FATHER/42 | [1/3] | [2] | [1/3] | [4/6/7/8/9] | [5] | [4/6/7/8/9] | [4/6/7/8/9] | [4/6/7/8/9] | [4/6/7/8/9] |
|  | boua; bapu | baba | boba | apa | au | apa | apa | apa |  |
| Son | [1/2/3/4/6] | [ $1 / 2 / 3 / 4 / 6$ ] | [1/2/3/4/6] | [ $1 / 2 / 3 / 4 / 6$ ] | [5] de atfi | [ $1 / 2 / 3 / 4 / 6$ ] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | $\mathrm{t}^{\text {h }}$ ay | $\mathrm{t}^{\text {hay }}$ | $\mathrm{t}^{\text {hay }}$ | $\mathrm{t}^{\text {h }}$ ay |  | $t^{\text {fay }}$ | tu: | tu: |  |
| older | [1/2/3/5] | [1/2/3/5] | [1/2/3/5] | [4/6/7/8] | [1/2/3/5] | [4/6/7/8] | [4/6/7/8] | [4/6/7/8] | [9] |
| brother | ate | ate | ate | atso | (ter) ate | at 50 | at 50 | at 50 | ázo |
| Younger | [1/2/5] | [1/2] | [3/4] | [3/4] | [1/5] | [6] | [7] | [8/9] | [8/9] |
| BROTHER | $\begin{aligned} & \text { (gato) ate; } \\ & \text { bəits } \end{aligned}$ | baits | baja; bara | baja | (atsu) ate | bete | nono | no | nò |
| maternal | [1/2/3/5/6] | [1/2] | [ $1 / 3 / 5 / 6$ ] | [4/7/8/9] | [1/3/5/6] | [1/3/5/6] | [4/7/8/9] | [4/7/8/9] | [4/7/8/9] |
| UNCLE | moma | mama | moma | adzay | moma | moma | azay | azay | ázay |
| maternal | [1] | [2] | [3] | [4/7] | [5] | [6] | [4/7] | [8] | [9] |
| AUNT | ama; nane | autse | amni | ane | (matfa) ene | tsema <br> ('older m.a.') | ane | matfuy | mèzon |
| PATERNAL | [1/2/5] | [1/2] | [3] | [4] | [1/5] | [6] | [7] |  | [9] |
| uncle | (teg) boua; <br> bapu | baba; babats | babu | tsipa | bapu | aku | apat $\int \mathrm{u}(\mathrm{n})$ | autfun | éu |
| paternal | [ $1 / 2 / 3$ ] | [ $1 / 2 / 3$ ] | [ $1 / 2 / 3$ ] | [4] | [5] | [6/7/8/9] | [6/7/8/9] | [6/7/8/9] | [6/7/8/9] |
| AUNT | nane | nane; nai | nane | tsima | ene | ane | ane | ane | áne |

TABLE 53 Automatic comparison of terms for body parts

|  | Sa [r] | $N i[2]$ | Ka [3] | Ro [4] | Ch [5] | $L a[6]$ | Po [7] | Ku [8] | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HEAD/72 | [1/2/3/4] | [1/2/3/4] | [1/2/3/4] | [1/2/3/4] | [5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | bal | bal | ba:l | bal | pitfa: | pija | ${ }^{\text {ng }}$ | go | ${ }^{\text {ngò }}$ |
| FACE | [1/3/4] | [2] | [1/3/4] | [1/3/4] |  | [6] | [7] |  |  |
|  | to | sto | to | to | muk ${ }^{\text {h }}$, | mumi | ŋวัэท | donok | yòdo(y) |
| HAIR | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [7/8/9] | [7/8/9] | [7/8/9] |
| (HEAD)/71* | kra | kra | kra | kra | kra | kra | $t \mathrm{a}$ | ta | tá |
| TAIL/69 | [1] | [2] | [3] | [4] | [5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | patsnı | pantsin | pətsənı | pikon | mets | mekon | јаma | jama | Øáma |
| EAR/73* | [ $1 / 2 / 3 / 4$ ] | [ $1 / 2 / 3 / 4$ ] | [ $1 / 2 / 3 / 4$ ] | [ $1 / 2 / 3 / 4$ ] | [5] | [6] | [7/9] | [8] | [7/9] |
|  | kənaŋ | kanay | kanay | kanay | rots | repay | namdzok | namt $\int$ k | námd3ok |
| EYE/74* | [ $1 / 2 / 4 / 5 / 6 /$ | [ $1 / 2 / 4 / 5 / 6 /$ | [3/4/5/6/ | [1/2/3/4/5/6/ | [1/2/3/4/5/6/ | [ $1 / 2 / 3 / 4 / 5 / 6 /$ | [1/2/3/4/5/6/ | [ $1 / 2 / 3 / 4 / 5 / 6 /$ | [1/2/3/4/5/6/ |
|  | 7/8/9] mig | 7/8/9] mig | 7/8/9] mik | 7/8/9] mik | 7/8/9] mi | 7/8/9] mi | 7/8/9] mik | 7/8/9] mik | 7/8/9] mík |
| nose/75* | [1/3/4] | [2] | [ $1 / 3 / 4$ ] | [1/3/4] | [5] | [6] | [7/9] | [8] | [7/9] |
|  | takuts | stakuts | takuts | takuts | rim | mur | na | nas | ná |
| mouth/76 | [1/2/3/4] | [1/2/3/4] | [1/2/3/4] | [1/2/3/4] | [5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | $\mathrm{k}^{\mathrm{h}}$ kan | $\mathrm{k}^{\text {hakoy }}$ | khakay | $k^{\text {bakay }}$ | a: | agor | $\mathrm{k}^{\text {ha }}$ | $\mathrm{k}^{\text {ha }}$ | $\mathrm{k}^{\text {há }}$ |
| тоотн/77* | [1/2/3/4] | [1/2/3/4] | [1/2/3/4] | [1/2/3/4] | [5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | gar | gar | gar | gar | sua | sua | so | so | só |
| HAND $/ 88^{*}$ | [1/2/4/6] | [1/2/4/6] | [3/4/6] | [1/2/3/4/6] | [5] | [ $1 / 2 / 3 / 4 / 6$ ] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | god | god | got | gut | lau | got | lakpa | lakpa | làkpa |
| FOOT/80 | [1/2/3/4] | [1/2/3/4] | [1/2/3/4] | [1/2/3/4] | [5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | bay | bay | bay | bay | boy | bayk ${ }^{\text {an }}$ | kajba | kaypa | kágba |

TABLE 54 Automatic comparison of other basic nouns

|  | $S a[1]$ | $N i\left[{ }^{\text {] }}\right.$ | Ka [3] | Ro [4] | Ch [5] | $L a[6]$ | Po [7] | Ku [8] | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ANIMAL/44 | [ $1 / 2 / 3 / 4 / 8 / 9$ ] | $\begin{aligned} & {[1 / 2 / 3 / 4 / 8 / 9]} \\ & \text { semt } \int \varepsilon n \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 8 / 9]} \\ & \text { semtfen } \end{aligned}$ | [1/2/3/4/6/8/9][5] |  |  |  | [ $1 / 2 / 3 / 4 / 8 / 9$ ] | $[1 / 2 / 3 / 4 / 8 / 9]$ |
|  | sako; <br> semtfen; sem |  |  | $t \int^{\text {h }} \mathbf{u m a}$; semtfen | rat | $t^{\text {h }}$ uma | simt $\sqrt{\text { m }}$ | semtfen | sémtJen |
| autumn | [ $1 / 2 / 3 / 4 / 5$ ] | [ $1 / 2 / 3 / 4 / 5$ ] | [1/2/3/4/5] | [ $1 / 2 / 3 / 4 / 5$ ] | [ $1 / 2 / 3 / 4 / 5$ ] | [6] | [7] | [8] | [9] |
|  | tfarmi | [1/2/3/5] <br> pjats | t.armi | t.armi | tfarmi | nug | namle | nam | tónga |
| BIRD/46 | [1/2/3/5] |  | [1/2/3/5] | [4] | [1/2/3/5] | [6] | [7] | [8] | [9] |
|  | pjats |  | pjats | pjad | pjats | prat | tfiu | dga | t $\sqrt{\text { a }}$ |
| BLOOD/64* | [ $1 / 2 / 3 / 5$ ] | $\begin{aligned} & {[1 / 2 / 3 / 5]} \\ & \text { polats } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 5]} \\ & \text { polats } \end{aligned}$ | [4/5/6] polad; $\int u{ }^{\text {i }}$ | [ $1 / 2 / 3 / 4 / 5$ ] | [4/6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | polats |  |  |  | pola | jui | $t^{\text {hak }}$ | $t^{\text {hak }}$ |  |
| BONE $/ 65^{*}$ | [1/2/3/5] | $\begin{aligned} & {[1 / 2 / 3 / 5]} \\ & \text { harכy } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 5]} \\ & \text { haray } \end{aligned}$ | $\begin{aligned} & {[4 / 6]} \\ & \text { harko } \end{aligned}$ | [1/2/3/5] | [4/6] | [7] | [8] |  |
|  | həray |  |  |  | haray | harko | rukok | rufa | rù:gok |
| BUTTER | [1/2/3/4/5/6/ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mar} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mar} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 / 6} \\ & 7 / 8 / 9] \mathrm{mar} \end{aligned}$ | [ $1 / 2 / 3 / 4 / 5 / 6 /$ | [1/2/3/4/5/6/ | [1/2/3/4/5/6/ | [1/2/3/4/5/6/ | [1/2/3/4/5/6/ |
|  | 7/8/9] mar |  |  |  | 7/8/9] mar | 7/8/9] mar | 7/8/9] mar | 7/8/9] mar | 7/8/9] màr |
| CAT ( $F$; M ) | [ $1 / 3 / 4 / 5 / 6 / 8$ ] | $\begin{aligned} & \text { [2] pə } \\ & \text { (məntr, skjo) } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6 / 8]} \\ & \text { pifi } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6 / 8]} \\ & \text { pifi } \end{aligned}$ | [ $1 / 3 / 4 / 5 / 6 / 8$ ] | [1/3/4/5/6/8] | [7/9] | [ $1 / 3 / 4 / 5 / 6 / 8$ ] | [7/9] |
|  | piji |  |  |  | pifi | pifi | pufi | pij ${ }^{1}$ | púfi |
| CHILD/39 | [1/2/3/4] | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { tf }{ }^{\text {h}} \mathrm{ay} \end{aligned}$ | [1/2/3/4]tf ${ }^{\text {hay }}$ [ | $[1 / 2 / 3 / 4]$t $5^{\text {han }}$ [ | [5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | tf ${ }^{\text {hay }}$ |  |  |  | at ${ }_{1}$ | tfigdjua | tfiva | tfiva | tfiva |
| CLOUD/160 | [ $1 / 2 / 3 / 4 / 5$ ] | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { d3u } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { dzu } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { dyu: } \end{aligned}$ | [ $1 / 2 / 3 / 4 / 5$ ] | [6] | [7] | [8] | [9] |
|  | d3u |  |  |  | zu | mukpa | makpa | tin | tín |
| COPPER | [1/2/3/4] tro- | $\begin{aligned} & {[1 / 2 / 3 / 4] \text { tro- }} \\ & \text { may } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4] \text { tro- }} \\ & \text { may } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4] \text { tro- }} \\ & \text { maŋ } \end{aligned}$ | [5] | [6] | [7/9] | [8] | [7/9] |
|  | may |  |  |  | tamay | tromay | sad | sayma | sấ: |
| DAY/178 | [ $1 / 2 / 3 / 4$ ] | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { lae } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { laje } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { laje } \end{aligned}$ | [5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | dear; lae |  |  |  | niri | nir | nımmo | jınmo; tiriy | jìnmo |
| DOG/47* | [1/2/3/4] | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { kui } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { kui } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { kui } \end{aligned}$ | [5] | [6/7/8/9] | [6/7/8/9] | [6/7/8/9] | [6/7/8/9] |
|  | kui |  |  |  | $\mathrm{k}^{\mathrm{h}} \mathrm{u}$ | $\mathrm{k}^{\text {hi }}$ | $\mathrm{k}^{\text {hi }}$ | $\mathrm{k}^{\text {hi }}$ | $k^{\text {hí }}$ |

table 54 Automatic comparison of other basic nouns (cont.)

|  | Sa [r] | $N i[2]$ | Ka [3] | Ro [4] | Ch [5] | La [6] | Po [7] | Ku [8] | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EGG/ 67 | [1] | [2] | [3/4/5] | [3/4/5] | [3/4/5] | [6] | [7] | [8] | [9] |
|  | litr | lito | lit | lit | li: | lili | guva | goya | gòã |
| FIRE/ $167 *$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{me} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{me} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{me} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{me} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{me} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{me} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{m} \varepsilon \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{me} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \text { mè } \end{aligned}$ |
| FOOD | $\begin{aligned} & {[1 / 2 / 3]} \\ & \mathrm{k}^{\mathrm{h}} \mathrm{Ju} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3]} \\ & \mathrm{k}^{\mathrm{hau}} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3]} \\ & \mathrm{k}^{\mathrm{hau}} \end{aligned}$ | [4] $t^{\text {thakth}}{ }^{\text {buk }} ;$ tsas | $\begin{aligned} & {[5]} \\ & \text { kon } \end{aligned}$ | [6] $t^{\text {thaktur }}$ | [7] tak ${ }^{\text {htuk }}$ | [8] saptuy | [9] sèptuy |
| FOREST/52 | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { zaygal } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { zaygal } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { dgaygal } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { dgaygal } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { zaygal } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { dgaygal } \end{aligned}$ | $\begin{aligned} & {[7 / 9]} \\ & \text { rija } \end{aligned}$ | $\begin{gathered} {[8]} \\ \text { riga } \end{gathered}$ | $\begin{aligned} & {[7 / 9]} \\ & \text { rìa } \end{aligned}$ |
| FRUIT/54 | $\begin{aligned} & {[1 / 2 / 3 / 5 / 6]} \\ & \text { folay } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 5 / 6]} \\ & \text { folay } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 5 / 6]} \\ & \text { folay } \end{aligned}$ | $\begin{aligned} & {[4]} \\ & \text { ufo } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 5 / 6]} \\ & \mathrm{p}^{\text {holay }} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 5 / 6]} \\ & \text { folay } \end{aligned}$ | [7] fintfuk | [-] - | [-] - |
| Glacier | $\begin{aligned} & {[1 / 2 / 3 / 5]} \\ & \text { risur } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 5]} \\ & \text { risur } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 5]} \\ & \text { risur } \end{aligned}$ | $\begin{aligned} & {[4 / 6]} \\ & \text { lisur } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 5]} \\ & \text { risur } \end{aligned}$ | $\begin{aligned} & {[4 / 6]} \\ & \text { lisor } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { rut } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { rut } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { rù: } \end{aligned}$ |
| GOAT | [1/2/3/4] <br> bakhor; ad3 <br> (male) | [1/2/4] <br> bak ${ }^{\text {hor; }}$ bolu <br> (male) | [1/3] bak ${ }^{\text {haray ( }}$ ); ad3 (male) | $\begin{aligned} & {[1 / 2 / 4]} \\ & \text { bak }^{\mathrm{h}} \partial \mathrm{r} \end{aligned}$ | $\begin{aligned} & {[5 / 6]} \\ & \text { tet } \end{aligned}$ | $\begin{aligned} & {[5 / 6]} \\ & \text { t } \overline{\mathrm{t}} \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { rama } \end{aligned}$ | [7/8/9] <br> rama; ravo | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { ràma } \end{aligned}$ |
| GOLD | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { zay } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { zay } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { zay } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { zay } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { zay } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { zay } \end{aligned}$ | $\begin{aligned} & {[7]} \\ & \text { sir } \end{aligned}$ | $\begin{aligned} & {[8 / 9]} \\ & \text { ser } \end{aligned}$ | $\begin{aligned} & {[8 / 9]} \\ & \text { sér } \end{aligned}$ |
| Grass/60 | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \mathrm{t} \sqrt{1} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \mathrm{t} \sqrt{1} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \mathrm{t} \mathrm{i} \mathrm{i} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \mathrm{tf} \mathrm{I}: \end{aligned}$ | $[1 / 2 / 3 / 4 / 5]$ $\mathrm{t} \sqrt{\mathrm{i}}$ | $\begin{aligned} & {[6]} \\ & \text { tsi } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { sa } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { sa } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { sá } \end{aligned}$ |
| hen | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { (mantr) } \\ & \text { kukari } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { (mantr) } \\ & \text { kukari } \end{aligned}$ | $[1 / 2 / 3 / 4 / 5 / 6]$ <br> (mantu) <br> kukari | $[1 / 2 / 3 / 4 / 5 / 6]$ <br> kukari | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { kukari } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { kukari } \end{aligned}$ | $\begin{aligned} & {[7 / 9]} \\ & \text { tJamo } \end{aligned}$ | [8] kukuri | [7/9] ţàmo |
| IRON | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { ron } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { ron } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { ron } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { ron } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5] \mathrm{r}} \\ & \text { on } \end{aligned}$ | $\begin{aligned} & {[6 / 9]} \\ & t \int \mathrm{ak}^{\mathrm{h}} \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { tfak } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { t } 5 \mathrm{ak} \end{aligned}$ | [6/7/8/9] <br> t fá:; t fák |

TABLE 54 Automatic comparison of other basic nouns (cont.)

|  | $S a\left[{ }^{1}\right]$ | $N i[2]$ | Ka [3] | Ro [4] | Ch [5] | $L a[6]$ | Po [7] | $K u[8]$ | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LAMB | [1/2/3/4] | [ $1 / 2 / 3 / 4$ ] | [ $1 / 2 / 3 / 4$ ] | [ $1 / 2 / 3 / 4$ ] | [5] | [6] | [7/9] | [8] | [7/9] |
|  | $k^{\text {hats }}$ | $k^{\text {hats }}$ | $k^{\text {hats }}$ | $k^{\text {hats }}$ | krats | krat | lu | lugu |  |
| LEAF/56* | $\begin{aligned} & {[1 / 3]} \\ & \text { pat }^{\text {hrap }} \end{aligned}$ | $\begin{aligned} & {[2]} \\ & \text { patran } \end{aligned}$ | $\begin{aligned} & {[1 / 3]} \\ & \text { pathran }^{\text {hrap }} \end{aligned}$ | [4/6] <br> patalan | [5] pat ${ }^{\text {b }}$ 居 | $\begin{aligned} & {[4 / 6]} \\ & \text { patalan } \end{aligned}$ | $\begin{aligned} & {[7]} \\ & \text { hok } \end{aligned}$ | $\begin{aligned} & {[8]} \\ & \text { hog } \end{aligned}$ | $\begin{aligned} & \text { [9] } \\ & \text { lip } \end{aligned}$ |
| $\begin{aligned} & \text { MAN } \\ & (H U M A N) / 38 \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mi} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mi} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mi} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mi} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mi} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mi} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mi} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mi} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mi} \end{aligned}$ |
| $\begin{aligned} & \text { MAN } \\ & (\text { MALE }) / 37 \end{aligned}$ | [1] dek ${ }^{\text {h }}$ res | [2] d $\mathrm{ck}^{\mathrm{h}}$ ros | [3] dzuan | [4] d $\mathrm{kk}^{\text {hrad }}$ | [5] boin | $\begin{aligned} & {[6 / 8]} \\ & \mathrm{mi} \end{aligned}$ | [7/8] <br> $k^{\text {hj}} \mathfrak{j}$ kton | $\begin{aligned} & {[6 / 7 / 8] \text { khjok- }} \\ & \text { tŋŋ; } \mathrm{mi} \end{aligned}$ | [9] $\mathrm{p}^{\text {húza }}$ |
| MEAT/63 | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 8 / 9] \mathrm{Ja} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 8 / 9] \mathrm{Ja} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 8 / 9] \mathrm{Ja} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 8 / 9] \mathrm{Ja} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 8 / 9] \mathrm{Ja} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 8 / 9] \mathrm{Ja} \end{aligned}$ | $\begin{aligned} & {[7]} \\ & \text { fia } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 8 / 9] \mathrm{Ja} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 8 / 9] \text { Já } \end{aligned}$ |
| MILK | $\begin{aligned} & {[1]} \\ & \text { k }^{\text {hiran }} \end{aligned}$ | $\begin{aligned} & {[2]} \\ & \text { k }^{\text {hiroy }} \end{aligned}$ | $\begin{aligned} & {[3 / 4 / 5]} \\ & \text { k }^{\text {braray }} \end{aligned}$ | $\begin{aligned} & {[3 / 4 / 5]} \\ & \text { kheray } \end{aligned}$ | $\begin{aligned} & {[3 / 4 / 5]} \\ & \text { kheran }^{\text {en }} \end{aligned}$ | [6] $k^{\text {hatipel }}$ | [7/8/9] <br> (h)oma | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { oma } \end{aligned}$ | $\begin{aligned} & \text { [7/8/9] } \\ & \text { òma } \end{aligned}$ |
| MOON/148 | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { golsay } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { golsay } \end{aligned}$ | $[1 / 2 / 3 / 4 / 5 / 6]$ <br> golsay | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { golsay } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { golsay } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { golsay } \end{aligned}$ | $\begin{aligned} & {[7 / 8]} \\ & \text { dava } \end{aligned}$ | $\begin{aligned} & {[7 / 8]} \\ & \text { dava } \end{aligned}$ | $\begin{aligned} & \text { [9] } \\ & { }_{\text {ndà:r }} \end{aligned}$ |
| mountain/ <br> 171* | $\begin{aligned} & {[1 / 2 / 4]} \\ & \text { dok hay; ray } \end{aligned}$ | $\begin{aligned} & {[1 / 2]} \\ & \text { d } 3 \mathrm{k}^{\mathrm{h}} a y \end{aligned}$ | [3] <br> dokay | $\begin{aligned} & {[1 / 4]} \\ & \text { ray } \end{aligned}$ | $\begin{aligned} & {[5]} \\ & \text { thol }^{\text {thol }} \end{aligned}$ | [6] ve | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { la } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { la } \end{aligned}$ | $\begin{aligned} & \text { [7/8/9] } \\ & \text { là } \end{aligned}$ |
| NIGHT/177* | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { tor ratig } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { ratıy } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { ratıy } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { ratıy } \end{aligned}$ | [5] muni | $[6]$ | [7] gonmo | [8] tsanmo | [9] gèemo; gòemo |
| POND; LAKE | $\begin{aligned} & {[1 / 2 / 3 / 5]} \\ & \text { soray } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 5]} \\ & \text { soray } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 5]} \\ & \text { soray } \end{aligned}$ | $\begin{aligned} & {[4]} \\ & \text { so: } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 5]} \\ & \text { soray } \end{aligned}$ | $\begin{aligned} & {[6 / 7 / 8 / 9]} \\ & \mathrm{t} 5 \end{aligned}$ | $\begin{aligned} & {[6 / 7 / 8 / 9]} \\ & \text { t } 50 \end{aligned}$ | $\begin{aligned} & {[6 / 7 / 8 / 9]} \\ & \text { t } 50 \end{aligned}$ | $\begin{aligned} & {[6 / 7 / 8 / 9]} \\ & \text { tfó } \end{aligned}$ |
| RAIN/151 | $[1 / 2 / 4 / 6 / 7 / 8 / 9]$ <br> guenrj; <br> tf ${ }^{\text {harva }}$ |  | $\begin{aligned} & {[3]} \\ & \text { lagzts } \end{aligned}$ | $\begin{aligned} & {[1 / 4 / 6 / 7 / 8 / 9]} \\ & \text { tf harva } \end{aligned}$ | [5] gojnı | $\begin{aligned} & {[1 / 4 / 6 / 7 / 8 / 9]} \\ & \text { tf harba } \end{aligned}$ | $\begin{aligned} & {[1 / 4 / 6 / 7 / 8 / 9]} \\ & \text { tf hấrua } \end{aligned}$ | $\begin{aligned} & {[1 / 4 / 6 / 7 / 8 / 9]} \\ & \text { tf harva } \end{aligned}$ | $\begin{aligned} & \text { [1/4/6/7/8/9] } \\ & \text { tf hárua } \end{aligned}$ |

table 54 Automatic comparison of other basic nouns (cont.)

|  | $S a[1]$ | $N i\left[{ }^{\text {] }}\right.$ | Ka [3] | Ro [4] | Ch [5] | $L a[6]$ | Po [7] | Ku [8] | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RIVER/152 | $\begin{aligned} & {[1 / 2 / 5]} \\ & \text { garə } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 5]} \\ & \text { garay } \end{aligned}$ | [3] somondraŋ | [4] nalay | $\begin{aligned} & {[1 / 2 / 5]} \\ & \text { garay } \end{aligned}$ | $\begin{aligned} & {[6]} \\ & \text { lugp }^{\text {ha }} \end{aligned}$ | [7] tsabbo | [8/9] tsa:np ${ }^{\text {h }}{ }^{0}$; tsa:np ${ }^{\text {h }}$ on | $\begin{aligned} & {[8 / 9]} \\ & \text { tsá:nfo } \end{aligned}$ |
| Rоот/57 | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { dzilay } \end{aligned}$ | [2] dziloy | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { dzilaŋ } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { dzilay } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { dzilay } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { zilan } \end{aligned}$ | [7] batak | [8] patak | [9] pàdak |
| ROPE/61 | $\begin{aligned} & {[1 / 2 / 3]} \\ & \text { bas } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3]} \\ & \text { ba } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3]} \\ & \mathrm{b} \int \end{aligned}$ | $\begin{aligned} & {[4 / 6 / 7 / 8 / 9]} \\ & \text { thakpa } \end{aligned}$ | $\begin{aligned} & \text { [5] } \\ & \text { lat } \end{aligned}$ | $\begin{aligned} & {[4 / 6 / 7 / 8 / 9]} \\ & \text { thakpa } \end{aligned}$ | $\begin{aligned} & {[4 / 6 / 7 / 8 / 9]} \\ & \text { thakpa } \end{aligned}$ | $\begin{aligned} & {[4 / 6 / 7 / 8 / 9]} \\ & \text { thakpa } \end{aligned}$ | $\begin{aligned} & {[4 / 6 / 7 / 8 / 9]} \\ & \text { thákpa } \end{aligned}$ |
| SALT/155 | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{tfa} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{t} \mathrm{a} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{t} \mathrm{a} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{t} \mathrm{a} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{t} \mathrm{a} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{ffa} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{ffa} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{ffa} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \text { tfá } \end{aligned}$ |
| SEED/55 | $\begin{aligned} & {[1 / 3 / 4 / 5]} \\ & \text { bijay } \end{aligned}$ | $\begin{aligned} & {[2]} \\ & \text { bijoy } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5]} \\ & \text { bijay } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5]} \\ & \text { bijay } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5]} \\ & \text { bijay } \end{aligned}$ | [6] podzad | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { sayon } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { sayon } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { sáyən; sápøn } \end{aligned}$ |
| SHEEP | $\begin{aligned} & {[1 / 2 / 3]} \\ & \mathrm{zed} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3](\mathrm{mal})} \\ & \mathrm{z} \mathrm{\varepsilon d} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3]} \\ & (\mathrm{mol}) \mathrm{z} \varepsilon \mathrm{~d} \end{aligned}$ | $\begin{aligned} & {[4]} \\ & \mathrm{k}^{\mathrm{h}} \mathrm{as} \end{aligned}$ | [5] modzat | $\begin{aligned} & {[6]} \\ & \text { bray } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { mamo } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { mamo } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { màmo ('ewe') } \end{aligned}$ |
| SILVER | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mul} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mul} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mul} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mul} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mul} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mul} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{mul} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \text { mol; } \\ & \mathrm{mel} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \text { múl } \end{aligned}$ |
| sKY/62 | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { sorgay } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { sorgay } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { sorgay } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { sorgay } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { sorgay } \end{aligned}$ | $\begin{aligned} & {[6 / 7 / 8 / 9]} \\ & \text { nam } \end{aligned}$ | $\begin{aligned} & {[6 / 7 / 8 / 9]} \\ & \text { nam } \end{aligned}$ | $\begin{aligned} & {[6 / 7 / 8 / 9]} \\ & \text { nam } \end{aligned}$ | $\begin{aligned} & {[6 / 7 / 8 / 9]} \\ & \text { nám } \end{aligned}$ |
| SNAKE/49 | [1] sapes | $\begin{aligned} & {[2 / 3 / 6]} \\ & \text { sapas } \end{aligned}$ | $\begin{aligned} & {[2 / 3 / 6]} \\ & \text { sapas } \end{aligned}$ | [4] savas | $\begin{aligned} & {[5]} \\ & \text { sapa } \end{aligned}$ | $\begin{aligned} & {[2 / 3 / 6]} \\ & \text { savas } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { dul } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { dol } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { dùl; dỳl } \end{aligned}$ |
| snow/64 | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { pom } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { pom } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { pom } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { pom } \end{aligned}$ | $\begin{aligned} & {[5]} \\ & \text { hay } \end{aligned}$ | $\begin{aligned} & {[6]} \\ & \text { ras } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { kha }^{\mathbf{h}} \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { k }^{\mathbf{h}} \mathbf{a} \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { khá: }^{\text {he }} \end{aligned}$ |
| $\begin{aligned} & \text { SPRING (SEA- } \\ & \text { SON) } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { renam } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { renam } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { renam } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \operatorname{rena}(\mathrm{m}) \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { renam } \end{aligned}$ | [6] gjanəm | [7] tf harko | [8] tonka | [9] píka |

TABLE 54 Automatic comparison of other basic nouns (cont.)

|  | $S a\left[{ }^{1}\right]$ | $N i[2]$ | Ka [3] | Ro [4] | Ch [5] | $L a[6]$ | Po [7] | $K u[8]$ | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Star/44** | [1/5] | [2/3] | [2/3] | [4/6/7/8/9] | [1/5] | [4/6/7/8/9] | [4/6/7/8/9] | [4/6/7/8/9] | [4/6/7/8/9] |
|  | tar; kar | skar | skar | karma | ka:r | karma | karma | karma | kárma |
| Stone/156* | [1/2/4/5/6] | [1/2/4/5/6] | [3] | [ $1 / 2 / 4 / 5 / 6]$ | [1/2/4/5/6] | [1/2/4/5/6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | rag | rag | runin | ra(g) | ra | kolon; ra |  |  |  |
| SUGAR | [ $1 / 2 / 3 / 4 / 5 /$ | [ $1 / 2 / 3 / 4 / 5 /$ | [ $1 / 2 / 3 / 4 / 5 /$ | [1/2/3/4/5/ | [1/2/3/4/5/ | [6] | [1/2/3/4/5/ | [1/2/3/4/5/ | [1/2/3/4/5/ |
|  | 7/8/9] tfini | 7/8/9] tfini | 7/8/9] tfini | 7/8/9] tfini | 7/8/9] tfini: | sini | 7/8/9] tfini | 7/8/9] tfini:; jarmo | 7/8/9] tfini |
| SUMMER | [1/2/3] | [1/2/3] | [ $1 / 2 / 3$ ] | [4] | [5] | [6] | [7/9] | [8] | [7/9] |
|  | sol | fol | fol | folo | sol | holay | jarka | عrka | járka |
| SUN/147* | [ $1 / 3 / 4$ ] | [2] | [ $1 / 3 / 4$ ] | [1/3/4] | [5/6] | [5/6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | june | jun | june | junek | ni | ni | nima | nima | jìma |
| TREE/51* | [1/2/3/6] | [1/2/3/6] | [1/2/3/6] | [4] | [5/7/8/9] | [ $1 / 2 / 3 / 6$ ] | [5/7/8/9] | [5/7/8/9] | [5/7/8/9] |
|  | bothay | bothay | bothay | botay | pa:y | bothay | pay | pay |  |
| village | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | defan | defay | defay | defay | d $£$ ¢ay | defay | jul | jul; jul |  |
| WATER/150* | [1/2/3/4/5/ | [1/2/3/4/5/ | [1/2/3/4/5/ | [1/2/3/4/5/ | [1/2/3/4/5/ | [1/2/3/4/5/ | [7/8/9] | [7/8/9] | [1/2/3/4/5/6/ |
|  | 6/9] ti | 6/9] ti | 6/9] ti | 6/9] ti | 6/9] ti | 6/9] ti | $\mathrm{t}^{\text {h }} \mathrm{u}$ | $\mathrm{t}^{\text {h }} \mathrm{u}$ | 7/8/9] t f ${ }^{\text {hú; tí }}$ |
| WIND//63 | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [7] | [8] | [9] |
|  | la:n | la:n | lan | la:n | la:n | la:n | lagda | lagpa | lágd $\varepsilon$ |
| WINTER | [ $1 / 2 / 3$ ] | [ $1 / 2 / 3$ ] | [1/2/3] | [4] | [5] | [6] |  | [8] |  |
|  | gun | gun | gun | guno | guni | gonay | gunk ${ }^{\text {ba }}$ | gunka | gùnga |
| woman/36 | [1/2] | [1/2] | [3] | [4] | [5] | [6] | [7/9] | [8] | [7/9] |
|  | ts $^{\text {h }}$ ssmi | ts ${ }^{\text {h }}$ gsmi | ts ${ }^{\text {hetses; }}$ <br> tshetses | ts ${ }^{\text {h }}$ esemi | mərı | monfin | $k^{\text {himamo }}$ | pomo | $\mathrm{k}^{\text {hímamo }}$ |

TABLE 54 Automatic comparison of other basic nouns (cont.)

|  | Sa [r] | $N i[2]$ | Ka [3] | Ro [4] | Ch [5] | La [6] | Po [7] | Ku [8] | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YAK | $\begin{aligned} & {[1 / 4 / 5 / 6 / 8 / 9]} \\ & \text { jak } \end{aligned}$ | $\begin{aligned} & {[2 / 3 / 4 / 5 / 6 / 7]} \\ & \text { jag } \end{aligned}$ | $\begin{aligned} & {[2 / 3 / 4 / 5 / 6 / 7]} \\ & \text { jag } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{jak} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \mathrm{ja} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \text { ja: } \end{aligned}$ | $\begin{aligned} & {[2 / 3 / 4 / 5 / 6 / 7]} \\ & \text { jag } \end{aligned}$ | $\begin{aligned} & {[1 / 4 / 5 / 6 / 8 / 9]} \\ & \text { jak } \end{aligned}$ | $\begin{aligned} & {[1 / 4 / 5 / 6 / 8 / 9]} \\ & \text { jàk } \end{aligned}$ |
| YAK (FEMALE) | [1/3/5] <br> brime | [-] - | [1/3/5] brime | $\begin{aligned} & {[4 / 6]} \\ & \text { brimo } \end{aligned}$ | [1/3/5] <br> brime | $\begin{aligned} & {[4 / 6]} \\ & \text { brimo } \end{aligned}$ | $\begin{aligned} & {[7 / 8]} \\ & \text { dimo } \end{aligned}$ | $\begin{aligned} & {[7 / 8]} \\ & \text { dimo } \end{aligned}$ | [9] jakmo |
| YEAR/779 | [ $1 / 3 / 4 / 5 / 6$ ] bosay | $\begin{aligned} & {[2]} \\ & \text { borfay } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { bofay } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { bofay } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { bofay } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4 / 5 / 6]} \\ & \text { bofay } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \mathrm{b} \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { lo } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { lò; lıे } \end{aligned}$ |

TABLE 55 Automatic comparison of adjectives

|  | Sa [r] | $N i[2]$ | Ka [3] | Ro [4] | Ch [5] | La [6] | Po [7] | Ku [8] | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BAD/186 | [1/3] | [2] | [1/3] | [4/6] | [5] | [4/6] | [7] | [8] | [9] |
|  | mari | ma:r | mari | halam | maforo | halam | $\mathrm{ak}^{\text {b }}$ | $\mathrm{t}^{\text {h }}$ \%a | yànba |
| beautiful | [ $1 / 2 / 3 / 4 / 5 / 6]$ | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [7] | [8] | [9] |
|  | fare | fare | fare | fare | fare | fare | laho | lakpo | là:fo |
| BIG/27 | [1/2/3/4] | [ $1 / 2 / 3 / 4$ ] | [1/2/3/4] | [ $1 / 2 / 3 / 4$ ] | [5] | [6] | [7/8] | [7/8] | [9] |
|  | teg; te:g | teg | teg | teg | tعi | t5ei | $t^{\text {h }}$ epo | $t^{\text {h }}$ epo | t $\int^{\text {hétpo }}$ |
| BLACK/776 | [1/2/3/4] | [1/2/3/4] | [1/2/3/4] | [1/2/3/4] | [5/6] | [5/6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | rok | rok | rok | rak | $\mathrm{k}^{\text {hai }}$ | $\mathrm{k}^{\text {hai }}$ | nakpo | nakpo | nàkpo |
| COLD/88 | [ $1 / 2 / 3 / 4$ ] | [1/2/3] | [1/2/3/4] | [1/3/4] | [5/6] | [5/6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | lis; $\mathrm{ff}_{\mathbf{i} \mathrm{k}}$; sok | tfik | sok; tfik | sot | $\mathrm{k}^{\text {hati }}$ | $\mathrm{k}^{\mathrm{h}}$ ati | tagmo | taymo | tàjmo |
| DRY/995 | [1] | [2/3] | [2/3] | [4] | [5/6] | [5/6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | t farmu | t farts | tfarts | tfar | fosi | fosi | kampo | kambo | kámpo |
| GOOD/885 | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { dam } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { dam } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { dam } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \text { dam } \end{aligned}$ | $\begin{aligned} & {[5]} \\ & \text { dzoi } \end{aligned}$ | $\begin{aligned} & {[6 / 8]} \\ & \text { epo } \end{aligned}$ | [7/9] <br> ganfin (peo- <br> ple); fimbo <br> (inan.); demo | $\begin{aligned} & {[6 / 8]} \\ & \text { epo } \end{aligned}$ | [7/9] <br> dèmo; zànbo; <br> Jímpo; Jímbo; <br> ètpo |
| Green/773 | [1/2] | [1/2] | [3/4] | [3/4] | [5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | ra:g | ra:g | rak | ra:k | $\mathrm{p}^{\text {hi }}$ | tip | јonpo; ŋønpo | јonpo; dompo | Øǿnpo <br> (blue-green) |
| LONG/28 | [1] | [2/3/4] | [2/3/4] | [2/3/4] | [5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | lames | lamos | lamas | lamas | rui | fui; sarpa | rippo | rippo | rìppo |
| NEW/83* | [1/2/3/4] | [1/2/3/4] | [1/2/3/4] | [1/2/3/4] | [5/6] | [5/6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | nug; ju:g | nu:g | nuk | nuk | nui | nui | soma | soma | sóma |
| OLD/184 | [1/2] usk | [1/2] ufk | [3] $\supset \mathfrak{j k}$ | [4] of | [5] hui | [6] ufi | [7/8/9] nippa | [7/8/9] пıрра | [7/8/9] nìgba |

TABLE 55 Automatic comparison of adjectives (cont.)

|  | $S a[1]$ | $N i\left[{ }^{\text {] }}\right.$ | Ka [3] | Ro [4] | Ch [5] | $L a[6]$ | Po [7] | Ku [8] | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RED/772 | [ $1 / 2 / 3$ ] | [1/2/3] | [1/2/3] | [4] | [5/6] | [5/6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | Juig | fuig | fuig | fuik | mãĩ | mãĩ | marbo | marbo | máruo |
| ROUND/igo | [1/4/7/9] | [2] | [3] | [1/4/7/9] | [5/6/9] | [5/6/9] | [1/4/7/9] | [8] | [1/4/5/6/7/9] |
|  | batles; girgir | batlos | batlas | girgir | kirkir | kirkir | girgir | toktık | kírkir; girgir |
| SMALL/32 | [ $1 / 2 / 3 / 4$ ] | [1/2] | [1/3/4] | [1/3/4] | [5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | zıgits; gato | gato | dzigits | dzigit | atsə | tsigdza | tfun | tfun | kúrkur; tfýn; t fún |
| StRAIGHT/189 | [1/2] | [1/2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] |
|  | soldzs | soldzs | soldas | silta | podəra | $\mathrm{k}^{\text {h }}$ osra | tajbo | ombo | $t^{\text {tágbo }}$ |
| WARM/180 | [1/2/3/4] | [ $1 / 2 / 3 / 4$ ] | [ $1 / 2 / 3 / 4$ ] | [1/2/3/4] | [5] | [6] | [7/9] | [8] | [7/9] |
|  | bok | bok | bok | bsk | tat ${ }^{\text {h }}$ ra | kot $\int^{\text {h }}$ ra | †ønmo; <br> tonmo | toypa | tènmo |
| WET/194 | [1/4] | [2] | [3] | [1/4] | [5] | [6] | [7] | [8] | [9] |
|  | pintf; this | spenək | pmk | $\mathrm{t}^{\text {his }}$ | rakfi: | $\mathrm{t}^{\mathrm{h}}$ ISi | lmnpa | lemba | lánte |
| WHITE/ 775 | [1/2/3/4] | [ $1 / 2 / 3 / 4$ ] | [ $1 / 2 / 3 / 4$ ] | [ $1 / 2 / 3 / 4$ ] | [5/6] | [5/6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | $\mathrm{t}^{\text {hog }}$ | $\mathrm{t}^{\text {hog }}$ | $\mathrm{t}^{\text {hog }}$ | $\mathrm{t}^{\text {hog }}$ | tãã | tfai | karvo | karbo | káruo |
| YELLOW/774 | [1/2] | [1/2] | [3/4] | [3/4] | [5/6] | [5/6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | pig | pig | pik | pi:k | lei | lei | servo | serbo | sérvo |

TABLE 56 Automatic comparison of some adverbs of time

|  | $S a[$ ] | $N i[2]$ | Ка [3] | Ro [4] | Ch [5] | $L a[6]$ | Po [7] | Ки [8] | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TODAY | $[1 / 2 / 3 / 4 / 6]$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 6]} \\ & \text { tory } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 6]} \\ & \text { toro } \end{aligned}$ | $[1 / 2 / 3 / 4 / 6]$ | $[5]$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 6]} \\ & \text { tory } \end{aligned}$ | $\begin{aligned} & {[7 / 9]} \\ & \text { tirrı } \end{aligned}$ | $\begin{aligned} & {[8]} \\ & \text { derıy } \end{aligned}$ | $\begin{aligned} & {[7 / 9]} \\ & \text { tirrı } \end{aligned}$ |
| yesterday | $\begin{aligned} & {[1 / 2 / 3]} \\ & \mathrm{me} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3]} \\ & \mathrm{m} \varepsilon \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3]} \\ & \text { me } \end{aligned}$ | [4] $\mathrm{m} \varepsilon$.pa | [5] <br> nei | $\begin{aligned} & {[6]} \\ & \text { firay } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { day } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { day } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { ndầy } \end{aligned}$ |
| 1 DAY BEF. Y. | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \mathrm{ri} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \mathrm{ri} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \mathrm{ri} \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4]} \\ & \mathrm{ri} \end{aligned}$ | [5] tubrja | [6] tofiray | [7/9] $k^{\text {henijak }}$ | [8] $\mathrm{k}^{\text {harnı }}$ | [7/9] <br> khénijak̉ |
| 2 DAYS BEF. Y . | [1] rigtsomja | $\begin{aligned} & {[2 / 3 / 4] \text { rkkt- }} \\ & \text { somja } \end{aligned}$ | $\begin{aligned} & {[2 / 3 / 4] \text { rikt- }} \\ & \text { somja } \end{aligned}$ | [2/3/4] rikt- <br> somja | [-] - | [6] pitu Jrray | $\begin{aligned} & {[7]} \\ & \text { dzinı! } \end{aligned}$ | $\begin{aligned} & {[8]} \\ & \text { dзeryı } \end{aligned}$ | [9] dzìnijak |
| 3 DAYS BEF. Y. | [1] riktsu omja | [2] r iktsomju эmja | [3] riktfamjau эmja | [4] riktsomjaktsu эmıa; riktsumıa omıa | [-] - | $\begin{aligned} & {[6]} \\ & \text { itu } \mathrm{fran} \end{aligned}$ | [-]- | [-] - | [9] gùnifak |
| 4 DAYS BEF. Y. | [-] - | [-] - | [-] - | [-]- | [-] - | [-] - | [-] - | [-] - | [9] t $\int^{\text {h }}$ únifak |
| tomorrow | [1/2/3/4] <br> nab; nasom | $\begin{aligned} & {[1 / 2 / 3]} \\ & \text { nab } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3]} \\ & \text { nab } \end{aligned}$ | [1/4] nasom | $\begin{aligned} & {[5]} \\ & \text { obi } \end{aligned}$ | [6] yarro | $\begin{aligned} & \text { [7/8/9] } \\ & \text { naymo } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { naymo } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { nàgmo } \end{aligned}$ |
| 1 DAYAFT. T. | $\begin{aligned} & {[1 / 3 / 4]} \\ & \text { romi } \end{aligned}$ | $\begin{aligned} & {[2 / 6]} \\ & \text { rome } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4]} \\ & \text { romi } \end{aligned}$ | $\begin{aligned} & {[1 / 3 / 4]} \\ & \text { romi } \end{aligned}$ | $\begin{aligned} & {[5]} \\ & \text { nirja } \end{aligned}$ | $\begin{aligned} & {[2 / 6]} \\ & \text { romst } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { nay } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { nay } \end{aligned}$ | $\begin{aligned} & \text { [7/8/9] } \\ & \text { náy; ná: } \end{aligned}$ |
| 2 DAYS AFT. ${ }^{\text {a }}$. | $\begin{aligned} & {[1 / 3]} \\ & \text { paye } \end{aligned}$ | $\begin{aligned} & {[2 / 4 / 6]} \\ & \text { pã } \tilde{\varepsilon}] \end{aligned}$ | $\begin{aligned} & {[1 / 3]} \\ & \text { paje } \end{aligned}$ | $\begin{aligned} & {[2 / 4 / 6]} \\ & \text { pãẽ } \end{aligned}$ | $\begin{aligned} & {[5]} \\ & \text { barja } \end{aligned}$ | $\begin{aligned} & {[2 / 4 / 6]} \\ & \text { pajst } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { d3e } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { dse } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { dyèj } \end{aligned}$ |
| 3 DAYS AFT. ${ }^{\text {t. }}$ | $\begin{aligned} & {[1 / 3]} \\ & \text { tfeye } \end{aligned}$ | $\begin{aligned} & {[2]} \\ & \tilde{\varepsilon} \tilde{e} \end{aligned}$ |  | $\begin{aligned} & {[4]} \\ & \mathrm{emi} \end{aligned}$ | [5] $\mathrm{t}^{\text {herja }}$ | $\begin{aligned} & {[3 / 6]} \\ & \varepsilon y \varepsilon t \end{aligned}$ | [7] guifak | [8] najmo naydze | $\begin{aligned} & \text { [9] } \\ & \text { gùi } \end{aligned}$ |
| 4 DAYS AFT. T. | $\begin{aligned} & {[1 / 3]} \\ & \text { tene } \end{aligned}$ | $\begin{aligned} & {[2]} \\ & \mathrm{t} \sqrt[{[\varepsilon \tilde{e} \tilde{y}}]{ } \end{aligned}$ | $\begin{aligned} & {[1 / 3]} \\ & \text { tहje } \end{aligned}$ | $\begin{aligned} & {[4]} \\ & \text { tfemi } \end{aligned}$ | $\begin{aligned} & {[5]} \\ & \text { kona } \end{aligned}$ | [-] - | [7] fuijak | [-] - | $\begin{aligned} & {[9]} \\ & \text { t } f^{[h i ́ i} \end{aligned}$ |

TABLE 57 Automatic comparison of numerals

|  | $S a\left[{ }^{1}\right]$ | $N i[2]$ | Ka [3] | Ro [4] | Ch [5] | La [6] | Po [7] | $K u[8]$ | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ONE/22* | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [ $1 / 2 / 3 / 4 / 5 / 6$ ] | [ $1 / 2 / 3 / 4 / 5 / 6]$ | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | Id | Id | Id | Id; i | i | i | tfik | tfik |  |
| TWO/23* | [ $1 / 2 / 3 / 4 / 6$ ] | [ $1 / 2 / 3 / 4 / 6$ ] | [ $1 / 2 / 3 / 4 / 6$ ] | [ $1 / 2 / 3 / 4 / 6$ ] | [5] | [ $1 / 2 / 3 / 4 / 6$ ] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | ni 5 | ni 5 | ni 5 | nis | nifi | nif | ni: | ni: |  |
| THREE/24* | [ $1 / 2 / 3 / 4$ ] | [ $1 / 2 / 3 / 4$ ] | [1/2/3/4] | [1/2/3/4] | [5] | [6] | [7/8/9] sum | [7/8/9] | [7/8/9] |
|  | sum | fum | fum | fum | homo | hom |  |  |  |
| FOUR/25 | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [ $1 / 2 / 3 / 4 / 5 / 6$ ] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | pa | pə | рə | pə | pə | pə | 3 i | 3 i | 31 |
| FIVE/26 | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \text { ŋа } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \text { ๆа } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \text { yа } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \text { ๆа } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \text { ŋа } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \text { ŋа } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6 /} \\ & 7 / 8 / 9] \text { ŋа } \end{aligned}$ | $[1 / 2 / 3 / 4 / 5 / 6 /$ | $\begin{aligned} & \text { [1/2/3/4/5/6/ } \\ & 7 / 8 / 9] \text { yá } \end{aligned}$ |
| SIX | [1/2/4/5/6/9] | [1/2/4/5/6/9] | [3/4/5/6/8/9] | [1/2/3/4/5/6/ | [1/2/3/4/5/6/ | [1/2/3/4/5/6/ | [7] | [3/4/5/6/8/9] | [1/2/3/4/5/6/ |
|  | tug | tug | tok | 8/9] tuk | 8/9] tu | 8/9] tu | $\mathrm{t}^{\text {hok }}$ | tuk | 8/9] tùk |
| SEVEN | [1/2/3/4/5] | [1/2] | [1/3/4/5] | [1/3/4/5] | [1/3/4/5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | (s)tif | stif | tif | tif | tif | finij | dun | dun; dun | dùn; dỳn |
| EIGHT | [1] | [2/3/4] | [2/3/4] | [2/3/4] | [5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | re | raje | raje | raje | rea | get | gjet | gjet; gjet | gjèt |
| NINE | [1/3/4/5] | [2] | [1/3/4/5] | [1/3/4/5] | [1/3/4/5] | [6/7/8/9] | [6/7/8/9] | [6/7/8/9] | [6/7/8/9] |
|  | gui | sgui | gui | gui | gui | gu | gu | gu | gù |
| ten | [1] | [2/3/4] | [2/3/4] | [2/3/4] | [5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | sع | saje | saje; saje | saje | sja | sa | tfu | tfu | t fú |
| tWENTY | [ $1 / 2 / 3 / 4 / 5$ ] | [ $1 / 2 / 3 / 4 / 5$ ] | [ $1 / 2 / 3 / 4 / 5$ ] | [1/2/3/4/5] | [1/2/3/4/5] | [6] | [7/8] | [7/8] | [9] |
|  | niza | niza | niza | niza | niza | nisa | jifu | jiju | niju |
| thinty | [1] | [2/3] | [2/3] | [4] | [5] | [6/8] | [7/9] | [6/8] | [7/9] |
|  | nizo se | nizo saje | nizo saje | nizau saje | niza sja | sumtfu | sumdzu | jifu nan tfu; sumt fu | súmd3u |

TABLE 57 Automatic comparison of numerals (cont.)

|  | $S a\left[{ }^{1}\right]$ | $N i[2]$ | $K a[3]$ | Ro [4] | Ch [5] | $L a[6]$ | Po [7] | $K u[8]$ | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| thirty-one | [1/2] | [1/2] | [3/5] | [4] | [3/5] | [6] | [7] | [8] |  |
|  | nizo sigit | nizo sigit | nizao sigit | nizau sigit | nizao sigit | nisau sait | sumdzu <br> fokfik | jifu nay <br> tfugfik; <br> sumt fu t fik | súmdzu <br> sokfik |
| FORTY | [ $1 / 2 / 3 / 4 / 5$ ] | [ $1 / 2 / 3 / 4 / 5$ ] | [1/2/3/4/5] | [1/2/3/4/5] | [ $1 / 2 / 3 / 4 / 5$ ] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | nif niza | nif niza | nif niza | nif niza | nif niza | nif nisa | 3 prtfu | nifuva ni:; 3iptfu | 3iptfu |
| Forty-one | [1/2] | [1/2] | [3] | [4/5] | [4/5] | [6] | [7] | [8] |  |
|  | nif nizo Id | nif nizo id | nif nizao id | nif nizau i(d) | nif nizau i | nif nisau id |  | nifuva ninay <br> tfik; 3 ipt fu t fik | 3ipt fu zakjik |
| ${ }_{\text {FIFTY }}$ | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] |  |
|  | nif nizo se | nif nizo saje | nif nizao saje | nif nizau <br> adha $^{\text {a }}$ | pãẽ | tai nisa | jabtfu | nifuva jinan <br> tfu; naptfu | nèptfu |
| SIXTY | [ $1 / 2 / 3 / 4 / 5$ ] | [ $1 / 2 / 3 / 4 / 5$ ] | [1/2/3/4/5] | [ $1 / 2 / 3 / 4 / 5$ ] | [ $1 / 2 / 3 / 4 / 5$ ] | [6] |  | [8/9] | [8/9] |
|  | Jum niza | Jum niza | Jum niza | fum niza | Jum niza | hum nisa | $t^{\text {h }}$ uktJu | nifuva sum; tugtfu; tuktfu | tùktfu |
| seventy | [1] | [2] | [3] | [4] | [5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | fum nizo s $\varepsilon$ | fum nizo saje | Jum nizao saje | fum nizau saje | fum nizao sja | hum nisao sa | duntfu | nifuva sumnan tfu; dun tfu; dontfu | dùntfu |
| SEVENTY-ONE |  | [1/2] |  |  |  | [6] | [7] | [8] |  |
|  | Jum nizo sigit | Jum nizo sigit | jum nizao sigit | $\begin{aligned} & \text { fum nizau } \\ & \text { sihi(d) } \end{aligned}$ | fum nizao sigit | hu(m) nisau sait | dunt fu donfik | nifuva sumnay tfug fik; duntfut fik |  |

TABLE 57 Automatic comparison of numerals (cont.)

|  | $S a[$ ] | $N i[2]$ | Ka [3] | Ro [4] | Ch [5] | $L a[6]$ | Po [7] | Кu [8] | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EIGHTY | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { pə niza } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { pə niza } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { pə niza } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { pə niza } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { pə niza } \end{aligned}$ | [6] pə nisa | $\begin{aligned} & {[7 / 8]} \\ & \text { gjazu } \end{aligned}$ | $\begin{aligned} & {[7 / 8]} \\ & \text { jifuva dzi; } \\ & \text { gjazu } \end{aligned}$ | [9] ghèdzu |
| NINETY | [1] pə nizo se | [2] pə nizo saje | [3] pə nizao saje | [4] pə nizau saje | [5] <br> pə nizao sja | [6] <br> po nisao sa | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { gupt }] \text { u } \end{aligned}$ | [7/8/9] <br> jifuva dzinay <br> tfu; guptfu | $\begin{aligned} & \text { [7/8/9] } \\ & \text { gùptJu } \end{aligned}$ |
| ONE HUNDRED | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { ra } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { ra } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { ra } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { ra } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { ra } \end{aligned}$ | $\begin{aligned} & {[6 / 7 / 8 / 9]} \\ & \text { gja } \end{aligned}$ | $\begin{aligned} & {[6 / 7 / 8 / 9]} \\ & \text { gja } \end{aligned}$ | $\begin{aligned} & {[6 / 7 / 8 / 9]} \\ & \text { gja } \end{aligned}$ | $\begin{aligned} & {[6 / 7 / 8 / 9]} \\ & \text { gjà } \end{aligned}$ |
| FIVE HUNDRED | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { yara } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { yara } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { yara } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { yara } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5]} \\ & \text { yara } \end{aligned}$ | $\begin{aligned} & {[6]} \\ & \text { yagja } \end{aligned}$ | $\begin{aligned} & \text { [7/8/9] } \\ & \text { yabgja } \end{aligned}$ | $\begin{aligned} & \text { [7/8/9] } \\ & \text { nabgja } \end{aligned}$ | $\begin{aligned} & \text { [7/8/9] } \\ & \text { yábgja } \end{aligned}$ |
| one <br> THOUSAND | $[1 / 2 / 3 / 4 / 5 / 6]$ <br> haza:r | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { haza:r } \end{aligned}$ | $[1 / 2 / 3 / 4 / 5 / 6]$ <br> hadza:r | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { haza:r } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { həzar } \end{aligned}$ | $\begin{aligned} & {[1 / 2 / 3 / 4 / 5 / 6]} \\ & \text { hadza:r } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { ty } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { ty } \end{aligned}$ | $\begin{aligned} & {[7 / 8 / 9]} \\ & \text { tóy; tón } \end{aligned}$ |
| one <br> thousand <br> one | [1/3/4/6] haza:ru id; haza:r id | [2] <br> id haza:r id | [1/3/4/6] <br> hadzaru id | [1/3/4/6] hazarru i(d) | [5] i həzar i | [ $1 / 3 / 4 / 6$ ] hadzaru id | $\begin{aligned} & {[7 / 8]} \\ & \text { tont fik } \end{aligned}$ | [7/8] tortfik naytfik; tontffik | [9] tógray tfik |

TABLE 58 Automatic comparison of question words

|  | Sa [r] | $N i[2]$ | Ka [3] | Ro [4] | Ch [5] | $L a[6]$ | Po [7] | $K u[8]$ | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| шно/ı | [1/4] | [2/3/4] | [2/3/4] | [1/2/3/4] | [5/7/8/9] | [6] | [5/7/8/9] | [5/7/8/9] | [5/7/8/9] |
|  | had | hat | hat | hat | su | on | su | su |  |
| WHAT/12 | [1] | [2] | [3] | [4] | [5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | $\mathrm{t}^{\text {h }}$ 2d | $\mathrm{t}^{\text {h }}$ | $\mathrm{t}^{\text {h }}$ ( d ) | $t^{\text {h }}$ t ${ }^{\text {t }}$ | $\mathrm{k}^{\text {he }}$ | $t^{\text {he }}$ e | t $\sqrt{1}$ | t 51 | t 51 |
| WHERE/3 | [1/2/3/4] | [1/2/3/4] | [ $1 / 2 / 3 / 4$ ] | [ $1 / 2 / 3 / 4$ ] | [5] | [-] - | [7] | [-] - | [9] |
|  | ham | ham | ham | ha(m) | go |  | kana |  | kàndu |
| WHEN/14 | [ $1 / 2 / 3 / 4$ ] | [ $1 / 2 / 3 / 4$ ] | [ $1 / 2 / 3 / 4$ ] | [ $1 / 2 / 3 / 4$ ] | [5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | teray; tray | teroy | trray | teray | home | tafpa | nam | nam | nàm |
| How/15 | [1] | [2] | [3/4/5] | [3/4/5] | [3/4/5] | [6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | hala | hales | hale | hale | hale | ale | tfuk | tfuk | tfúk |

TABLE 59 Automatic comparison of personal pronouns

|  | $S a\left[{ }^{1}\right]$ | Ni [2] | Ka [3] | Ro [4] | Ch [5] | La [6] | Po [7] | Ки [8] | $N a[9]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1SG/1* | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [ $1 / 2 / 3 / 4 / 5 / 6$ ] | [ $1 / 2 / 3 / 4 / 5 / 6]$ | [7/8/9] | [7/8/9] | [7/8/9] |
|  | gə | gə | gə | gə | gə | gə; gut | ŋа; man | уа | nà; mà |
| 2SG.H/2 | [ $1 / 2 / 3 / 4 / 5$ ] | [1/2/3/4/5] | [1/2/3/4/5] | [1/2/3/4/5] | [ $1 / 2 / 3 / 4 / 5$ ] | [6] | [7] | [8] | [9] |
|  | ki | ki | ki | ki | ki | giray | net | rue | $\mathrm{k}^{\text {bón }}$ |
| 2SG.NH/2* | [ $1 / 2 / 3 / 4 / 5 / 6$ ] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [1/2/3/4/5/6] | [ $1 / 2 / 3 / 4 / 5 / 6$ ] | [1/2/3/4/5/6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | kə; ka | ka | ka | ka | ka | ka | $\mathrm{k}^{\mathrm{h}}$ øt | $\mathrm{k}^{\mathrm{h}} \boldsymbol{\square} \mathrm{t}$ | $\mathrm{k}^{\text {h́ǵt }}$ |
| $3 S G / 3$ | [ $1 / 2 / 3 / 4 / 5 / 6$ ] | [ $1 / 2 / 3 / 4 / 6$ ] | [1/2/3/4] | [1/2/3/4] | [1/5] | [1/2/6] | [7/8/9] | [7/8/9] | [7/8/9] |
|  | do; hodo; hono; no; hojo; | n ; d | do | ono; do | hojo | no | $\mathrm{k}^{\text {b }}$ | $\mathrm{k}^{\mathrm{h}}$, | $\mathrm{k}^{\mathrm{h}}$ |
| IPL.INCL/4* | [1/3] | [2/4/5] | [1/3] | [2/4/5] | [2/4/5] | [6] | [7] | [8] | [9] |
|  | nija | nip | nija | n 19 | niŋsa; niŋ | nıppay | may.ak | hotset | òn |
| 1PL.EXCL/4 | [1] | [-] - | [3] | [4] | [-] - | [6] | [-] - | [-] - |  |
|  | kijan |  | nifi | kafay |  | kirapay |  |  | màjak; jèt |
| 2PL.H/5 | [1/2] | [1/2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] |
|  | kino | kino | kifi | kin | kat 5 a | kınpay | jijak | $\mathrm{k}^{\text {heray }}$ | khón $\int$ ak; |
| 2PL.NH/5 | [1] | [2] | [-] - | [4] | [-] - | [-] - | [7] | [-] - | [9] |
|  | kano | kanego |  | kan |  |  | $\mathrm{k}^{\text {hjo }}$ ¢ $\mathrm{a}^{\text {a }}$ |  | khóvat; k $^{\text {hó }}$ ak |
| $3^{P L} / 6$ | [ $1 / 2 / 3$ ] | [ $1 / 2 / 3$ ] | [1/2/3] | [-]- | [5] | [6] | [7] | [8/9] | [8/9] |
|  | dogə; hodogo; honogə; nวgว | nugo; dogo | dogo |  | homo tetpay | domi | pia | $\mathrm{k}^{\text {houa }}$ | khóvat; $^{\text {he }}$ khófak $^{\text {b }}$ |

# Linguistic Relationships in Kinnaur ir: Language Contact between Sino-Tibetan and Indo-Aryan 

## 1 Introduction

The language varieties which can claim a non-recent presence in Kinnaur represent two language families, Sino-Tibetan (ST) and Indo-Aryan (IA), the largest subbranch-in terms of number of languages-of the Indo-Iranian primary branch of Indo-European. In Chapter 5, we investigated the genealogical relationships among the ST varieties of Kinnaur. In this chapter, we will also bring Kinnauri Pahari (see Chapter 4)—a language from the Western Pahari subbranch of IA-into the comparison, where we will examine some instances of linguistic similarities between Kinnauri (ST) and Kinnauri Pahari (IA) both spoken in the Sangla region in Kinnaur. We will occasionally extend the comparison to other IA and ST languages spoken outside Kinnaur, with a view to elucidate contact and even areal phenomena as a component of the linguistic ecology of Kinnaur.

## 2

Language Contact in Kinnaur

Kinnaur presents several layers of language contact, both across and within language families. Traditionally, language contact was direct, happened in a local context, and came about through trade, administrative interaction and religion. Today, we are witnessing another layer of linguistic influence, that of the increasing dominance of Hindi (IA), the official language of Himachal Pradesh as well as one of the two national languages of India. With the changing sociocultural conditions and a growing awareness among the locals about Hindi as a medium for social mobility, it is increasingly becoming the inter-community language. An even more recent and more global contact phenomenon is the growing importance of English (India's other national language).

Hindi and English are seen as modern languages, associated with acquiring status-bearing jobs and higher social status, whereas local languages (Kinnauri and Kinnauri Pahari alike) are associated with a traditional, non-modern lifestyle. Further, because of the development of modern mass media (e.g. television and streamed media) locals in the villages are now regularly exposed
to the official state-level and nationally dominant languages to an unprecedented extent. This means that the previously dominant role of Kinnauri is increasingly being taken over by Hindi. The younger generation of Kinnauri and Kinnauri Pahari speakers increasingly use Hindi as their lingua francathe function earlier served by Kinnauri ${ }^{1}$ —and frequently mix their native language with Hindi and Indian English words (see Chapter 1).

In sum, the language situation in Kinnaur is such that we would expect to find that language contact has played a significant role in the development of its languages. This certainly holds for the two linguistic varieties spoken alongside each other in the Sangla region in Lower Kinnaur whose mutual interaction is in focus in this chapter: the ST language Kinnauri (described in Chapter 2) and the IA language Kinnauri Pahari (described in Chapter 4). In the following sections we present some lexical and grammatical features shared by Kinnauri and Kinnauri Pahari against expectations, given their genealogical affiliations, in order to throw some light on the traditional (non-recent) contact situation in this area. ${ }^{2}$

## $3 \quad$ Kinnauri and Kinnauri Pahari: Shared Linguistic Features

### 3.1 Lexicon: Names of the Days and Months

The names of the days and months as well as the system used in dividing a year into months are quite similar in Kinnauri to that of the names and the calendar system found in Kinnauri Pahari and also in the IA languages of the plains (i.e., outside the Himalayan region). ${ }^{3}$

Table 6o shows that the names of the days of the week in Kinnauri ${ }^{4}$ have similar counterparts in IA languages and that the names in Kinnauri are very different from those of Navakat.

[^95]table 60 The days of the week in Kinnauri and Indo-Aryan

| Gloss | Kinnauri | IA correspondences <br> (K: Kotgarhi; hin: Hindi; san: Sanskrit) ${ }^{5}$ | Navakat |
| :---: | :---: | :---: | :---: |
| Monday | suãray, sva:ray, suøa:raך | swā:r (K); somvair (hin) | dzà ndàva |
| Tuesday | mayglaray | mupgal (K); mapgalvair (hin) | dzà mígmar |
| Wednesday | budaray | būd: (K); bud ${ }^{\text {h }}$ va:r (hin) | dzà làkpa |
| Thursday | brespot | brēst (K); braspativarr (hin) | dzà fúrvu |
| Friday | fukaray | fük:ar (K); fukrava:r (hin) | dzà pásay |
| Saturday | fonferes | fenfar, fonic:ar (K); fanivair (hin); | dzà pénba |
|  |  | śanaiścarah (san) |  |
| Sunday | tuar, tuarray | twa:r (K); itvar (hin) | dzà nima |

As was the case with the days of the week, the terms for months in Kinnauri are also very similar to the terms used in those IA languages where the Hindu religion is prevalent (see Table 61). Here we find not only similarities in the forms of the names of the months, but also in the way in which the year is divided into months. The first column ("Period") describes how a year is divided into months in both Kinnauri and in Kinnauri Pahari; the second column provides the Kinnauri terms and the third column provides corresponding month names in some IA languages.

Similar borrowing of the Hindu calendar system and names for the weekdays is also found in some other West Himalayish languages, e.g., Kanashi (own fieldwork data), Darma (Willis Oko 2019: 467), and marginally also in Tinani (see below).

[^96]TABLE 61 The calendar system in Kinnauri and IA languages

| Period | Kinnauri | IA correspondences (kjo: Kinnauri Pahari; K: Kotgarhi; hin: Hindi; san: Sanskrit) |
| :---: | :---: | :---: |
| Mid March-mid April | tetray | tetair (kjo); tset:ar (K); tfstram (hin); caitrah (san) |
| Mid April-mid May | b( ${ }^{h}$ aifak ${ }^{\text {a }}$, ${ }^{\text {, befakay }}$ | ba: $\int a:(\mathrm{kjo})$; ba $\int \bar{\varepsilon}:(\mathrm{K}) ; ~ \nu \varepsilon \int a: k^{h}$ (hin) |
| Mid May-mid June | dseftay |  |
| Mid June-mid July | a:jaray | a: fa:r (kjo); fār, fā:r (K); āṣậ̣hah (san) |
| Mid July-mid August | fonay | fa:ma:n (kjo); fauף (K); fra:vaך (hin); śrāvaṇạ (san) |
| Mid August-mid September | $\left.b{ }^{\prime}\right)$ adray | baidro (kjo); b̌ód:ar (K); badº (hin) |
| Mid September-mid October | indramay, indromay | indroma:y (kjo); s̄̄̊f (K); āśvayujah (san) |
| Mid October-mid November | kaitiay | ka:ti (kjo); kat:I (K); ka:rtik (hin) |
| Mid November-mid December | mokjeray | mogfri (kjo); maŋgfor, maghar (hin); mārgaśirāh (san) |
| Mid December-mid January | pofay | $p o f(\mathrm{kjo}) ; p \bar{\rho} \int(\mathrm{~K}) ; p \supset \int(\mathrm{hin}) ; p a u s ̣ a h ̣ ~(\mathrm{san})$ |
| Mid January-mid February | ma:y | may (kjo); māg: (K); ma:gh (hin) |
| Mid February-mid March | $p^{\text {hagnay }}$ | phāg:əŋ (K) |

table 62 The calendar system in Navakat and Tinani

| Period | Navakat | Tinani |
| :---: | :---: | :---: |
| January | ${ }^{\text {ndàva tàybo }}$ | kunza la, kunzla |
| February | ndàva fíva | püqa la, püqla |
| March | ndàva súmba | tsugzu la |
| April | ndàva ziva | brefu la |
| May | dàva Yáva | hetsim la |
| June | ${ }^{\text {ndàva tùkpa }}$ | sur la |
| July | ndàva dùnba | felik la |
| August | dàva gétpa | mifak |
| September | dàva gúva | mayrar |
| October | dàva tfúva | kjurla |
| November | ndàva tfúkfikpa | mindzugla |
| December | ndàva tfúgi:va | bintu la |

Distinct from this, two other ST languages of Himachal Pradesh for which we have the relevant data-Navakat and Tinani ${ }^{6}$ —exhibit both a different division of the year into months ("Period") and naming of the months ("Navakat"

6 Tinani data in this chapter come from my own fieldnotes collected during 1988-1994 and the data that were collected in my research project Digital documentation of Indian minority
table 63 The weekdays in Tinani

## Tinani IA correspondences (K: Kotgarhi; hin: Hindi)

| Monday | sombar (e) ${ }^{7}$ | swāar (K); somva:r (hin) |
| :---: | :---: | :---: |
| Tuesday | maŋgar(e) | muŋgal (K); maŋgalvair (hin) |
| Wednesday | budd(e) | būd: (K); bud ${ }^{\text {n }}$ vair (hin) |
| Thursday | brespat(e) | brēst (K); braspativa:r (hin) |
| Friday | fukk(e)r(e) | fūk:ar (K); fukravair (hin) |
| Saturday | fontfar(e) | fènfar, fənıc:ər (K); fanivarr (hin) |
| Sunday | aituar (e) | twair (K); itvair (hin) |

and "Tinani"), as shown in Table $62 .{ }^{8}$ The Navakat naming system, where the months are simply numbered, is also found in Tibetan. Interestingly, while Tinani has not borrowed the IA calendar system (Table 62), it has borrowed the names of the weekdays (Table 63). For further details, see Saxena and Borin (2022b).

To summarize, the terms for the days of the week and months as well as the calendar system in Kinnauri are very similar to that found in many IA languages. Singh (1990: 248) describes how the village gods were claimed to have more Hindu affinities in the Lower Kinnaur region, and more Buddhist affinities in Upper Kinnaur. He suggests that the Hindu and Buddhist characteristics that we see today in modern Kinnaur are secondary developments, which are superimposed on the earlier-pre-Hindu and pre-Buddhist religion of the ethnic population in Kinnaur. Keeping in view the socio-cultural factors involved, it is very likely that, in this case, the IA influence on Kinnauri comes either

[^97]through religion or through some other channel, and not directly from Kinnauri Pahari.

### 3.2 Lexicon: Wordsfor Past and Future Time Adverbs

ST languages tend to have distinct words for past and future time adverbs (i.e., for terms corresponding to the English yesterday and tomorrow; day before yesterday and day after tomorrow). This is illustrated in Table 64 with examples from some West Himalayish languages, including Kinnauri. ${ }^{9}$

Distinct from this, in many IA languages the same term is used for both past and future time adverbs (e.g. Hindi kal, Assamese kali, Punjabi kala and Rajasthani kyāla are all used in these languages for both 'yesterday' and 'tomorrow'). However, Kinnauri Pahari has separate sets of terms for past and future time adverbs (e.g., hi:dz 'yesterday', ka:le 'tomorrow'; see also Table 65), ${ }^{10}$ just as in Kinnauri-though the terms are different in the two languages.

At first glance, one might be tempted to conclude that Kinnauri Pahari has borrowed this feature from Kinnauri, but this is not borne out by the distribution of this feature across IA. There are severalWestern Pahari languages as well as some languages in other subfamilies of IA, which exhibit this pattern (e.g., Marathi ka:l 'yesterday', udja: 'tomorrow'; Kashmiri yēwa, kāl 'yesterday', pagāh 'tomorrow') (see the emphasized items in Table 65).

Further, Sanskrit, which represents the older stage of the contemporary IA languages, had this distinction; terms such as hīdz 'yesterday' and shū̄̄ 'tomorrow' (see Table 65) are related to the Sanskrit forms hyas 'yesterday' and śvas 'tomorrow', which have disappeared from IA languages such as Hindi, but are retained in some modern IA languages.

9 Sources of information for Table 64: Byangsi (S.R. Sharma 2003a); Rongpo (S.R. Sharma 2003b); Gahri (D.D. Sharma 1989); Raji (Shree Krishan 2003), and Chaudangsi and Darma from the STEDT database. The data on Kanashi, Pattani and Kinnauri are from my fieldnotes.
10 The data in Table 65 come from the digital South Asian dictionaries available online at http://dsal.uchicago.edu/dictionaries/ (including Turner 1966), from the South Asian IDS/LWT lists available at https://spraakbanken.gu.se/en/projects/digital-areal-linguistic s (Borin et al. 2013), and from Bailey (1908, 1920), except for Chinali (D.D. Sharma 1989) and Jaunsari (Satish 1990). Here, as elsewhere in this volume, I have retained the original transcription but normalized the language names. In some cases a language may have a way of unambiguously referring to 'yesterday' or 'tomorrow', for instance, by adding a modifier to the basic word, e.g., Bangla gatakāla 'yesterday': āgāmīkāla 'tomorrow'. Crucially however, the basic word may be used on its own meaning either 'yesterday' or 'tomorrow', and in such cases must be disambiguated by the context. This is similar to English words like grandmother or brother, which may, but do not have to, be further specified using maternal/paternal or little (younger)/big (older), respectively.
table 64 Past and future time adverbs in West Himalayish (ST)

| Language | 'yesterday' | 'tomorrow' | 'the day before yesterday’ | 'the day after tomorrow' |
| :---: | :---: | :---: | :---: | :---: |
| Byangsi | nyarre | nimja: | hrija | sumja: |
| Chaudangsi | nyara | maci | hrajya | ninjya |
| Darma | nimay | khai | hrijya | nimjya |
| Gahri | ya: | acci | giwa |  |
| Kanashi | mud | na:b | ri:d | romi |
| Pattani/Manchad | èreg | mùtay | túrag | júrag |
| Raji | byara | kalla |  |  |
| Rongpo | nya:r | oro | thamin | ba:gya |
| Kinnauri | me: | na:b | ri: | romi |
| Tinani | $e k i\left({ }^{( }\right)$ | muntay | tufar | njurgja |

table 65 Past and future time adverbs in IA languages. Boldface indicates lexical differentiation of past and future time reference
Language 'yesterday' 'tomorrow' 'two days ago' 'the day after

| Assamese | kali |  |
| :--- | :---: | :---: |
| Awadhi | kālh, kāl, kallhi |  |
| Gujarati | kāl |  |
| Hindi | kal |  |
| Kashmiri | yēwa, kāl $\quad$ pagāh |  |
| Marathi | ka:l $\quad$ udja: |  |
| Punjabi | kallh, kall, kallu |  |
| Prakrit | kalaim, kallim, kalhim |  |
| Rajasthani | kyāla |  |

## Western Pahari

| Bhalesi | $h \bar{\imath}$ | kāla | parē | tsōŭth |
| :---: | :---: | :---: | :---: | :---: |
| Baghati | kal | kalk $\bar{a}$ |  | pōrshū |
| Bilaspuri |  | kăl |  | părsū |
| Bilaspuri, South ern |  | kăl |  | părsũ |
| Chambeali |  | kal |  | parsū |

TABLE 65 Past and future time adverbs in IA languages. (cont.)

| Language | 'yesterday' | 'tomorrow' | 'two days ago' |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| 'the day after |  |  |  |  |
| tomorrow' |  |  |  |  |

An overview of past and future time adverbs in IA (and ST) languages is presented in Figure 19. It shows that among the IA languages outside the Himalayan region the normal system is the use of the same form for both, while the use of separate forms for 'yesterday' and 'tomorrow' among IA languages is more frequent in the Himalayan region, where they are in contact with ST languages.

One plausible conclusion could be that the contact with ST languages has favored a preservation of the older system in a number of Western Pahari languages, as seen in Table 65 (the boldfaced items). Once again, this seems to be an areal feature, and not a phenomenon exclusive to Kinnauri Pahari.


FIGURE 19 Words for past and future time adverbs (blue/darker = IA; red/lighter = ST; $\mathbf{\Delta}=$ same; ■ = different)

### 3.3 Lexicon: Words for 'mouth' and 'face'

Many IA languages have a lexical item which is used for both 'face' and 'mouth' (Table 66). ${ }^{11}$ Table 66 includes IA languages from different sub-branches. It shows that the majority of these languages (21 languages) exhibit a polysemous item expressing both 'face' and 'mouth'. The six languages where this polysemy is not attested all belong to the Western Pahari branch of IA (see the Western Pahari section at the bottom of Table 66).

Unlike IA languages, ST languages (both inside and outside Kinnaur) typically have two separate terms for 'face' and 'mouth' (Tables 67 and 68). In our sample of 25 ST language varieties, only three-Tabo, Tibetan and Zemeshow evidence of this polysemy, reflecting two reconstructed Proto-SinoTibetan items *zyal 'face, mouth' and *s-murr 'mouth, face', both of which have reflexes with both meanings at least in Written Tibetan.

[^98]In general in ST languages the reflexes of *zyal typically mean 'face', 'cheek', etc., while those of *s-mu:r tend to mean 'mouth', 'lip(s)' or the like. It is worth keeping in mind here that the meaning of the proto-item has been assigned on the basis of the sum of attested meanings in the daughter languages. Thus, it is far from certain that the 'mouth'-'face' polysemy is original to Sino-Tibetan.

Semantically, the meaning extension from 'mouth' to 'face' is not surprising. According to Wilkins (1996) this is the expected direction of semantic shift. With body-part terms, the semantic development is always from the part to the whole, and never the other way around (i.e., from 'face' to 'mouth' in this case). In Wilkins's data, this particular semantic change is attested only in SinoTibetan (Wilkins 1996: 276). Still, it does not happen in languages as a matter of course; most languages seem not to have this particular polysemy. But it is widespread among the IA languages. ${ }^{12}$

This semantic shift is extremely rare among ST languages. The IA language Kinnauri Pahari is similar to Kinnauri and other ST languages in this respect (Tables 67 and 68). ${ }^{13}$

Note that while the term for 'face' in Kinnauri Pahari (mu) is etymologically related to the IA term for 'face' (see Table 66), the term for 'mouth' $\left(k^{h} a k\right)$ is a borrowing, most probably from Kinnauri. $k^{h} a$ 'mouth' is found in many ST languages.

The non-polysemy that we observe here between 'face' and 'mouth' in Kinnauri Pahari distinguishes Kinnauri Pahari from the IA pattern, where 'mouth' and 'face' are usually the same. ${ }^{14}$ At the same time, note that several other IA languages (spoken outside Kinnaur), too, exhibit the Kinnauri Pahari/ST pattern (see Table 66) —most of them concentrated in the Himalayan region (see Figure 20).

12 Indeed—and with reservations for incomplete data-it seems that the item described in The Pali Text Society's Pali-English dictionary (Rhys Davids and Stede 1921-1925) as "Ānana (nt.) [Vedic āna, later Sk. ānana from an to breathe] the mouth; adj. (- ${ }^{\circ}$ ) having a mouth Sdhp 1o3; Pgdp 63 (vikaṭ ${ }^{\circ}$ )" may have had its meaning extended to 'face', too, in, e.g., Bangla and Oriya, in analogy with the reflexes of mukha.
13 Sources: for Table 67 Darma (Willis Oko 2019), Ladakhi (Bettina Zeisler p.c.), Raji (Shree Krishan 2003), Tabo (Roland Bielmeier p.c.), Kanashi, Gahri and some Tinani information are from my own fieldnotes. Some Tinani data was collected in the project Digital documentation of Indian minority languages in collaboration with the Central Institute of Indian Languages. The information about the remaining languages in this table comes from the online Sino-Tibetan Etymological Dictionary and Thesaurus (STEDT): http://stedt .berkeley.edu/search (see also Matisoff 2003). The data in Table 68 come from my own fieldwork.
table 66 Words for 'mouth' and 'face' in IA languages. Boldface indicates that separate terms are used for 'mouth' and 'face'

|  | 'Mouth' | 'Face' |
| :---: | :---: | :---: |
| Bangla | $\bar{a} n a n a$ |  |
| Bhojpuri | mũh |  |
| Chinali | mùh, šunṭh, šund | muh |
| Gujarati | moḍhũ, mõḍu |  |
| Hindi | mu |  |
| Kashmiri | $\dot{\text { às }}$ |  |
| Maithili | mũh |  |
| Marathi | ānana |  |
| Nepali | muk ${ }^{\text {a }}$ a |  |
| Oriya | ānana, muhã, muhañ |  |
| Pali | assa, ānana, mukha | $\bar{A} s a, m u k h a$ |
| Punjabi | $m u \bar{h}$ |  |
| Pashai Dardic | dōr |  |
| Prakrit | assa, muha, vayaṇa |  |
| Rajasthani | mūṇ̣ō |  |
| Sanskrit | múkha |  |
| Sindhi | mũhũ |  |
| Sinhalese | muya, muva |  |
| Western Pahari |  |  |
| Bhadrawahi | $\bar{a} s h$ | tuttar |
| Jaunsari | $m \ddot{u}$ | lamvk $^{\text {h }}$ |
| Kinnauri Pahari | $k^{h} a k$ | mu |
| Kotgarhi | mu, jāt | $m u, m u \bar{h}$ |
| Kotguru | $j \bar{a} t$ | mū̆h |
| Pahari, Shimla varieties | mû | muk ${ }^{\boldsymbol{h}}$ ro |
| Pahari, Solan variety | $m \hat{u}$ |  |
| Siraji, Outer | $j{ }^{\text {a }}$ t | muh |
| Sirmauri | $m \hat{u}$ |  |

14 It is important to point out here that the focus here is only on the fact that these IA languages have a same/similar form for 'mouth' and 'face'. This does not, however, rule out that some of these languages also may have separate terms for 'face' and 'mouth', e.g. Hindi tJehera, which means only 'face'.
table 67 Words for 'mouth' and 'face' in ST languages outside Kinnaur. Boldface indicates indicate that the same term is used for 'mouth' and 'face'

|  | 'Mouth' | 'Face' |
| :---: | :---: | :---: |
| Angami | útiê, úmé | $z^{h}$ ie |
| Ao | tepang | techek |
| Apatami | àgung | nyímo |
| Bhramu/Baram | anam | mik |
| Bunan | $a g, a$ ? | mod |
| Byangsi | $a:$ | ๆ, wamy |
| Chaudangsi | ak | hu-mẽ |
| Darma | Pa | womi |
| Gahri | $a: ?$ | mot |
| Kanashi | $k^{\text {hakay }}$ | toj, Sakal |
| Ladakhi | $z^{h} a, k^{h} a$ | rdong |
| Mishimi | $t^{\text {hrímbim }}$ | nyâ |
| Pattani | วs, $a, \stackrel{a}{ }$ | mod |
| Raji | khabs-ru | $b \bar{a} \eta \bar{a}, m h a \eta$ |
| Tabo | $k^{h} a, \underline{c} \bar{a} l$ | $\epsilon \bar{a} l, ~ \eta o ̄ n d \bar{o} \eta, d o \bar{\eta}$ |
| Tibetan | kha 'mouth'; żal 'mouth, face'; mur 'mouth, face' | gdoy, gdong pa 'face, countenance'; bźin 'face, countenance'; zal 'mouth, face'; ŋo, ŋos 'face, countenance, air, look'; mur 'mouth, face' |
| Tinani | $a, ~ \partial s$ | mod |
| Tod | $k^{h} a$ | doy |
| Zeme | mi mui | mimui |

To summarize this linguistic feature, the data presented here suggest that IA and ST languages typically display two separate patterns in this regard. The typical IA pattern is to have the same form used for 'mouth' and 'face', whereas the typical ST pattern is to have two separate terms for 'mouth' and 'face'. The IA Kinnauri Pahari (and also some other Western Pahari languages) are similar to the ST languages in this regard, where Kinnauri Pahari has borrowed $k^{h} a k$ 'mouth' from ST and has restricted the use of its own lexical item $\left(m u k^{h}\right)$ for 'face'. As this development is also found in some other Western Pahari languages, once again, this is not a case of an isolated loanword in Kinnauri Pahari, rather the influence is more pervasive.
table 68 Words for 'mouth' and 'face' in Kinnauri Pahari and ST varieties in Kinnaur. Boldface indicates that separate terms are used for 'mouth' and 'face'

|  | 'Mouth' | 'Face' |
| :--- | :--- | :--- |
| Kinnauri Pahari (IA) | $k^{h} a k$ | $m u$ |
| ST Kinnauri varieties |  |  |
| Kinnauri | $k^{h} a k a y$ | to |
| Chitkul | $k^{h} a k u$ | mok $k^{h} a \eta$ |
| Sairako | $k^{h} a k a \eta$ | to |
| Nichar | $k^{h} a k a \eta$ | to |
| Pooh | $k^{h} a$ | yonan |
| Navakat | $k^{h a} a$ | yòday |



FIGURE 20 Words for 'mouth' and 'face' (blue/darker = IA; red/lighter = ST; $\mathbf{\Delta}=$ same; $\boldsymbol{\square}=$ different)

### 3.4 Lexicon: Convergence ${ }^{15}$ in the Numeral System

It is a well-established fact that in the late stages of Proto-Indo-European the numeral system was a consistent decimal system, where higher decades (e.g. $20,30,40,50,100$ ) were derived etymologically from the word for 10 by the principle $2 \times 10=20,3 \times 10=30,10 \times 10=100$ etc. (Winter 1992). This late PIE decimal system was inherited into Proto-Indo-Iranian, and it has carried on in the modern IA languages. The decimal system is found in many modern IA languages. But there are some modern IA languages which display a modified version of the vigesimal counting system (a vigesimal-decimal system where 50 , for example, is derived by $2 \times 20+10$ ). ${ }^{16}$

In the Himalayan region, one finds occasional instances of the vigesimal numeral system. ${ }^{17}$ Both Kinnauri and Kinnauri Pahari display this pattern, as shown in Table 69.
table 69 Vigesimal numeral system in Kinnauri and Kinnauri Pahari ${ }^{18}$

| Gloss | Sangla Kinnauri | Kinnauri Pahari | IA (K: Kotgarhi; hin: Hindi; san: Sanskrit) |
| :---: | :---: | :---: | :---: |
| 1 | id | $\varepsilon k(k)$ | $e: k(\mathrm{~K})$ |
| 2 | nif | dui | dui (K), $d(u) v e(\mathrm{san})$ |
| 3 | fum | tron | $\operatorname{cosn}(\mathrm{K})$; trị̣̄i (san) |
| 4 | po | tsa:r | tsair (K), catvārah (san) |
| 5 | ya | paits | pa:ndz (K), pañca (san) |
| 7 | (s)tif | sa:t | sāt:, sā:t (K), sapta (san) |
| 10 | se | do $\int$ | dof (K), daśa (san) |
| 11 | sigid | gja:ra: | ge:ra (K); ekādaśa (san) |
| 15 | soja | pandra: | pondra (K); pancadaśa (san) |

15 Note that the term "convergence" is used here slightly differently from at least some usages of this term in the literature, notably Hickey (2010:15) and Matras (2010), who both use the term "convergence" to refer to a change in a contact situation, which has emerged as a consequence of a combination of language internal and language external (i.e. contact) factors, where both these two factors have converged to give one result. Here we require that the system which we find in these two languages is distinct from the system that is found in either of the two concerned languages. It is the third system which has emerged. In a vigesimal system, an alternative way of expressing 50 is as 'two and a half twenties'.
17 The vestiges of the old barter system prevalent until today in temples in Kinnaur suggest that even that was based on 20 . The system is called rekhay; the word itself is an IA loanword ( $r^{k} k^{h} a$ 'line').
18 Gahri (D.D. Sharma 1989), too, exhibits the vigesimal system: niza 'twenty', nissa (< nis+ niza [two+twenty]) 'forty', sum-niza 'sixty', pi-niza 'eighty'.

## table 69 Vigesimal numeral system in Kinnauri and Kinnauri Pahari (cont.)

| Gloss | Sangla Kinnauri | Kinnauri Pahari | IA (K: Kotgarhi; hin: Hindi; san: Sanskrit) |
| :---: | :---: | :---: | :---: |
| 20 | nidza | bit.f, $\varepsilon$ cisa | $b \bar{u}$, viṃśati ( san ) |
| $21(20+1)$ | nidzo id | eisa \&k | $k \stackrel{̄}{j}(\mathrm{~K})$ |
| $22(20+2)$ | nidzo nif | sisa dui | $b a ̄ j(\mathrm{~K})$, dvāviṃśati ( san ) |
| $23(20+3)$ | nidzo fum | sisa ron | $t e \bar{j}, t e \bar{j} b \bar{u}(\mathrm{~K})$ |
| $24(20+4)$ | nidzo po | cisa tsair | tssbi (K) ${ }^{19}$ caturviṃśati ( san ) |
| $30(20+10)$ | nidzo se | sisa dof |  |
| $31(20+11)$ | nidzo sigid | sisa gjara: | ikkattis (hin) |
| $40(2 \times 20)$ | nijnidza | duibi:fo |  |
| $50(2 \times 20+10)$ | nifnidzo se | dve:sa dof | padza (K), pancaśat (san) |
| 60 ( $3 \times 20$ ) | fumnidza | tronbi:jo |  |
| $8 \mathrm{o}(4 \times 20)$ | ponidza | tsairbi:jo |  |
| 100 | ra | ra, so |  |



FIGURE 21 Numeral systems (blue/darker = IA; red/lighter = ST; $\mathbf{\Delta}=$ base 10; $\mathbf{v}=$ base 20)

19 e:k bi: tsair [one ( $\times$ ) twenty (+) four] is also used for ' 24 '.

Some observations can be made here. First, both Kinnauri and Kinnauri Pahari exhibit the vigesimal system. However, while the basic system is the same in both these languages, the forms are not borrowed, only the constructions. Second, among the Western Pahari (IA) languages included in Figure 21, it seems that the numerals and the numeral system in Baghati, Kiunthali, Kotgarhi and Inner Siraji are very similar to that of Hindi (Bailey 1908, 1920). Kotgarhi (Hendriksen 1986) and Chinali (D.D. Sharma 1989) are the only languages in my material which show traces of a vigesimal system, even if the forms are built on IA material (Chinali: $b \bar{i}$ 'twenty', dui $b i$ ' 'forty', dui bio das 'fifty', träi bi 'sixty', trāi bio daš 'seventy'), even though the default system in Kotgarhi seems to be the decimal system.

According to Mazaudon (2010), in the Sino-Tibetan language family, the vigesimal system is found in languages only in or close to the Himalayas. ${ }^{20}$ Among the IA/Iranian languages, the vigesimal system is found not only in the Himalayan region, but it is also found in Central Asia; it is also found in many Iranian languages, in Caucasian languages (Edelman 1999). Both Mazaudon (2010) and Edelman (1999) suggest contact as a possible origin for the vigesimal system in these languages. Thus, to summarize, there is some contact factor involved, but it seems to extend beyond Kinnaur, and also beyond the Himalayas (so far as IA languages are concerned).

### 3.5 Lexicon/Grammar: the Agentive Nominalizer

Apart from the clear cases of contact-induced changes where the direction of influence is clear, there are also some examples of language change where the two languages have become more similar to each other than they are to their genealogically related languages.

The two languages have a very similar way of forming deverbal agent nouns, as illustrated in Table 71. Further, both languages make a gender distinction here, which is otherwise very uncharacteristic of ST languages.

[^99]```
TABLE 71 Deverbal agent nouns in Kinnauri and
Kinnauri Pahari
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Gloss Kinnauri Kinnauri Pahari
'beggar (м)' un-tsja: mang-do-sja:
'dancer (м)' tfar-tsja: nats-do-sja:
'dancer ( F ) tgar-tse: nats-di-se:

There is at least one other ST language (Pattani) where -tsa is used as the agentive nominalizer. In Navakat, the nominalizer - $(k)$ an occurs in similar constructions instead (see Chapter 3 for details). Similarly, Western Pahari languages such as Jaunsari (Satish 2000), too, use a different marker: git-ärı 'singer' (cf. git 'song', gitıänä 'to sing').

This is a clear case of borrowing, but the direction of borrowing is unclear. Note that the Kinnauri Pahari agentive forms contain the element -do/-ndo : -di/-ndi. This is the habitual-aspect form, originating in a present participial marker (see Chapter 4). This seems to suggest that the agentive nominalizer in Kinnauri Pahari is a later addition, suffixing to the already participial IA form.

Furthermore, the agentive nominalizer in both languages makes a gender distinction, where -tsja:/-sja: occurs with masculine head nouns and -tse:/-se: occurs with feminine head nouns. While there are instances of systematic gender distinctions being made in ST languages, at least in the derivational system (e.g. -pa/-po for male referents vs. -ma/-mo for female referents, found in Navakat and to some extent in Kinnauri), the particular formal means used here are telling. Many IA languages express the masculine-feminine distinction through the use of forms ending in $-a /-o$ in the masculine, contrasting with forms ending in $-i /-e$ in the feminine. ${ }^{21}$ It is possible, that even if the agentive nominalizer itself is the result of ST influence on Kinnauri Pahari, the gender distinction in the agentive nominalization in Kinnauri is due to IA influence.

[^100]TABLE 71 Past/perfective = past participle in some IA languages of the Himalayas

| Language | Past | Perfective | Past PTCP |
| :--- | :--- | :--- | :--- |
| Bhales | V-to | V-to AUX | V-to/tuo |
| Bilaspuri | V-ea | V-ea AUX | - |
| Gadi | V-ea | V-ea | V-ea |
| Kangri | V-ea | V-ea | V- |
| Kotgarhi | PST PTCP | PST PTCP | PST PTCP |
| Kishṭawari | V-mut | V-mut | V-m |
| Paḍari | V-ta | - | V-ta |
| Poguli | V-tumut AUX | V-tumut AUX | V-tumu |
| Punchi | V-ea | V-ea AUX | - |
| Rambani | V-tumut AUX | V-tumut AUX | V-tumu |
| Tinauli | V-ea | V-ea AUX | V-e |

### 3.6 Grammar: Perfective and Imperfective Aspect Markers

ST and IA languages in general exhibit two different patterns with respect to the historical source of their modern perfective and imperfective aspect markers. In IA languages this is frequently the participial forms, where the present participial form is reanalyzed as the present/imperfective/habitual aspect marker and the past participial form is reanalyzed as the past/perfective aspect marker. Like a typical IA language, Kinnauri Pahari, too, has reanalyzed its participle forms as aspect markers: -ind $\varepsilon$ functions as the perfective aspect marker and as the past participle marker, and -(n)do/-(n)di functions both as the habitual aspect marker and as the present participial marker. This is also corroborated by the other Western Pahari languages presented in Tables 71-72: the neighboring IA varieties have past/perfective markers which are the same as the past participle forms (Table ${ }_{71}$ ) and the present/imperfective aspect markers are the same as the present participle markers (Table 72). ${ }^{22}$

Present/imperfective $=$ present participle in some IA languages of the Himalayas

| Language | Present Ind. | Imperfective | Present PTCP |
| :--- | :--- | :--- | :--- |
| Bhadrawahi | - | V-to AUX | V-to |
| Bhales | V-tau | V-tau AUX | V-tau |
| Gadi | V-da | V-da | V-da |
| Kangri | V-da | V-da | V-da |
| Eastern Mandeali | V-daa | V-daa AUX | V-daa |
| Kishṭawari | V- $a n$ AUX | V- $a n$ | V- $a n$ |
| Kului | PART $+s$ | - | - |
| Mandi Siraji | V- $\tilde{a}$ | V- $\tilde{a}$ AUX | V- $\tilde{a}$ |
| Paḍari | V-na | V-na AUX | V-na |
| Pangwali | V-ta | - | - |
| Poguli | V- $t i$ AUX | V- $t i$ AUX | V- $t i$ |
| Punchi | V-na AUX | V-na AUX | V-na |
| Rambani | V- $(a)$ AUX | V- $(a)$ AUX | V- $(a)$ |
| Siraji | V- $(a)$ AUX | V- $a$ AUX | V- $a$ |

Distinct from this, the modern past/perfective and present/imperfective/habitual aspect markers in most ST languages do not come from participles, but from other kinds of nominalization.

Additionally, those ST languages which do exhibit participle-based forms are predominantly spoken in geographical regions where they have been in contact with IA languages for a long time (Saxena 1997b); see Figure 22. This is also the case with Kinnauri. In Kinnauri the two perfective markers are a reduplicated form of the verb and -is, which coincide with the past participle forms (see Chapter 2, Section 4.5.2.2). The habitual (imperfective) aspect markers are $-t s$ and -id, which are the same as the present participle forms (see Chapter 2, Section 4.5.2.3).

Based on these data, some generalizations can be made: While the IA languages consistently show one pattern, where the past participial form and past/perfective aspect markers are the same, among the ST languages, only a few languages (e.g. Thami, Rai, Kinnauri, Kanashi) show the "IA" pattern (i.e., where the perfective aspect marker is the same as the past participial form.); other ST languages retain their indigenous path of grammaticalization. Returning to Kinnauri and Kinnauri Pahari, once again, we find that while the two languages have become more similar with regard to the mechanism used,


FIGURE 22 Past/perfective same as participle (blue/darker = IA; red/lighter = ST; $\mathbf{\Delta}=$ yes; $\boldsymbol{\square}=$ no)
the forms are not borrowed. Further, once again, this contact-induced feature is not restricted to Kinnauri and Kinnauri Pahari, rather it displays a wider geographical footprint.

### 3.7 Grammar: the 1PL Inclusive-Exclusive Distinction

Both Kinnauri and Kinnauri Pahari makes the inclusive-exclusive distinction in the first person plural pronouns:

## Kinnauri Kinnauri Pahari

| 1PLI | kifa | ta:mori |
| :--- | :--- | :--- |
| 1PLE | nijo | a:mori |

The inclusive-exclusive distinction is brought forth, at times, in discussions on "South Asia as a linguistic area" (e.g. Southworth 1974; Emeneau 198o; Masica 1991, 2001). Among the IA languages, at least the following languages have been mentioned in the literature as having this distinction: Marathi, Gujarati, Sindhi, some Rajasthani varieties, and the Tirupati dialect of Saurashtra (Southworth 1974; Emeneau 198o; Masica 1991, 2001; Osada 2004). In the same vein, it has been pointed out that all three varieties of Marathi, Kannada and Urdu spoken in the Kupwar village exhibit this distinction, where Marathi is suggested
to have influenced Kannada and Urdu (Gumperz and Wilson 1971). ${ }^{23}$ The presence of this distinction in IA is generally assumed to reflect an areal feature, with Dravidian as the most likely source (Masica 1991). ${ }^{24}$ Further, all the IA languages with the inclusive-exclusive distinction discussed in the literature exhibit the same path in developing this distinction, where they are said to have reanalyzed the reflexive pronoun as the inclusive form (Masica 2001; Osada 2004).

LaPolla (2005) presents an overview of the inclusive-exclusive distinction in ST languages based on an examination of 170 languages. Out of these, 69 languages make this distinction in one way or another., and it is found in almost all sub-groups today. LaPolla (2005) claims that this distinction cannot be reconstructed for Proto-Sino-Tibetan or for the mid-level reconstruction, rather each individual sub-group seems to have developed this distinction independently.

Kinnauri Pahari seems to be unique among the Western Pahari languages in having this distinction in personal pronouns, a feature which it shares with the coterritorial but unrelated language Kinnauri (Chapter 2), ${ }^{25}$ as well as with Navakat (Chapter 3). Further, unlike other IA languages, which have this distinction, in Kinnauri Pahari the reflexive form (ap SG, apori PL) shows resemblance, if any, with the 1PLE pronoun (a:mori)—and not the 1PLI pronoun (ta:mori). ${ }^{26}$

Once again, we see here that while Kinnauri Pahari and Kinnauri share a pattern, they use two different sets of forms.

23 The WALS article on the inclusive-exclusive distinction in independent pronouns (Cysouw 2013) includes some South Asian languages, viz. Brahui (Dravidian), Burushaski (Isolate), Hindi (IA), Kannada (Dravidian), Ladakhi (ST) and Mundari (Munda), among which only Ladakhi and Mundari show this distinction. It is mentioned that standard Kannada has lost this distinction-usually reconstructed for Proto-Dravidian—due to IA influence.
24 Contrary to this general view, Osada (2004) argues instead in favor of a purely languageinternal development of this distinction in IA languages. He proposes the following historical internal development: reflexive pronoun $>2$. H pronoun $>1$ PLI pronoun. He bases his analysis on the facts that the reflexive pronoun (Sanskrit ātmān 'self') occurs in many IA languages as a $2 . \mathrm{H}$ pronoun, and in the IA languages with the inclusive-exclusive distinction, this pronoun functions as the inclusive pronominal form.
25 Kinnauri in its turn shares this feature with most of the other West Himalayish languages, at least with Pattani, Chhitkuli, Kanashi, Tinani, Gahri, Darma, Chaudangsi and Johari. Source: D.D. Sharma (1989), except for Kanashi (my fieldnotes). This distinction is prevalent in ST languages (LaPolla 2005). Among the IA languages of the north this feature exists in only one other language: Prasun, a language of Nuristan (Claus Peter Zoller, p.c.).

26 The same seems to be also the case with the evidential interpretations in the finite verb.

## 3. $8 \quad$ Grammar: the Finite Verb System

Finally, the finite verb system in Kinnauri is structurally similar to the system typically found in IA languages, where the grammatical categories of tense and aspect generally are given separate expression. This is distinct from the system found, e.g. in Navakat, where tense and evidentiality are expressed by portmanteau morphs. ${ }^{27}$

## 4 Summary

The results of the investigation of the linguistic structures discussed in this chapter can be summarized as in Table 73. The terms MAT (replication of linguistic matter, i.e., linguistic form or substance) and PAT (replication of linguistic linguistic pattern or structure) are due to Matras and Sakel (2007).

Except for the inclusive-exclusive feature, irrespective of the direction of influence, the spread of features is wider than just restricted to the contact between Kinnauri and Pahari Kinnauri in the Sangla region.

In the contact situation which I have presented here, Kinnauri is the locally dominant language, and Kinnauri Pahari is in the subordinate position. Thus, one would expect to find lexical borrowing from Kinnauri in Kinnauri Pahari, while Kinnauri should show evidence of structural influence from Kinnauri Pahari. As we see in Table 73, this does not hold completely. Which is the dominant language and which is the less dominant language in a contact situation can be a bit more complicated.

One language can be both the superstratum language and substratum language at the same time, in relation to different languages. This seems to be the case in the Indian Himalayan region-where Kinnauri has the superstratum role in relation to Kinnauri Pahari, but it has the substratum role in relation to other IA languages of the plains (including Hindi), which are also used in Hindu religious contexts. This probably accounts for the seeming bidirectionality of influence which we have observed here.

[^101]table 73 Borrowing between Kinnauri (ST) and Kinnauri Pahari (IA)

| Type of borrowing | Feature | Direction |
| :--- | :--- | :--- |
| MAT and PAT | Names of the days and months | IA $>$ ST |
|  | Agentive nominalizer | unclear ${ }^{28}$ |
| PAT (and partly MAT) | 'mouth'/'face' | ST $>$ IA |
| PAT only | 'yesterday'/'tomorrow' | ST $>$ IA |
|  | Source of aspect markers | IA $>$ ST |
|  | The finite verb structure | IA $>$ ST |
|  | Inclusive-exclusive distinction | ST > IA |
| Convergence of PAT | Higher numeral system | - |

In order to understand the linguistic structure of a language, we need to take into consideration its context, its function. In the same way, when investigating contact-induced changes in a location, we should also take into consideration the linguistic and social structure not only at the micro-level (the village), but also the larger region in which it is embedded, to get a better understanding of the language changes which we are observing at the micro-level.

In all the instances where Kinnauri exhibits the "IA" pattern, it distinguishes itself from Navakat (also spoken in Kinnaur). This again confirms the conclusions from Chapter 5. If one were to plot isoglosses for the ST languages of Kinnaur, they will divide the region into at least two parts, where the Sangla area as a whole (or Kinnauri in particular) and Navakat will end up separated by a large number of isoglosses; it is very likely that the isoglosses delimiting Kinnauri will group it with other West Himalayish languages such as Kanashi.

## The Many-Faceted Linguistic Landscape of Kinnaur

This monograph endeavors to contribute to the documentation of the linguistic situation of a particular region in the Indian Himalayas-the Kinnaur district of Himachal Pradesh-which so far has been very poorly described. The aim has been to gain a better understanding of the languages traditionally spoken in this region, i.e., Sino-Tibetan and Indo-Aryan languages, both as independent linguistic entities and as parts of a multi-faceted linguistic ecology.

This aim has determined the structure of the text, together with the practical constraint imposed by the desire to stay within a reasonable length of exposition.

In the first chapter, the geography, demography and administrative organization of Kinnaur were described, in order to provide a background to the following linguistic investigations.

The languages traditionally spoken in Kinnaur belong to the (mutually unrelated) Sino-Tibetan (ST) and Indo-Aryan (IA < Indo-European) language families. The ST languages have been sociolinguistically dominant in Kinnaur until recently, to the extent that one of them—Kinnauri-has functioned as a lingua franca at least in Lower Kinnaur. At the same time, the genealogical relationships among these ST varieties-the KST varieties-are insufficiently investigated, which to a large extent is because the varieties themselves are poorly described.

In Chapters 2 and 3 of this monograph, I have provided linguistic sketchesbased on my own primary fieldwork-of two of the KST varieties, which have been chosen so as to represent the extreme poles of these varieties: Kinnauri, spoken in the extreme south of the district, in Lower Kinnaur, is described in Chapter 2, and Navakat, spoken in the extreme north, in Upper Kinnaur, is described in Chapter 3. As far as the linguistic structures of the varieties and my data have allowed, the sketches have been structured along parallel lines.

In Chapter 4, the IA language Kinnauri Pahari-coterritorial with Kinnauri and some other KST varieties-was described in a similar fashion.

Hopefully, the sketches of Kinnauri and Navakat will have shown that these two KST varieties are quite different, which raises the question of how these and the other recognized KST varieties are interrelated. In Chapter 5, I turn to a broader investigation-again based on my own primary fieldwork-of the relationships among nine KST varieties (those of the villages Nichar, Sangla,

Chitkul, Kalpa, Kuno, Labrang, Poo, Ropa and Nako). There has not been any comparative linguistic study of the KST varieties (except by the present author; see Saxena 2011; Saxena and Borin 2011, 2013), and consequently no systematic basis for examining how they relate to one another. The aim of Chapter 5 was to examine the genealogical relationships among these nine KST varieties using a computational approach applied to empirical primary language data, mainly basic vocabulary (a modified Swadesh list), but also some grammatical features.

The procedure which was used for comparing the basic vocabulary lists is similar to recent works in dialectometry and lexicostatistics in relying on a completely automatic comparison of the items in the word lists. However, it differs from most of these works (McMahon et al. 2007 being a notable exception) in its usage of rules tailored to the particular linguistic configuration under investigation, rather than a general method for string comparison. In this respect, it falls somewhere in between traditional genealogical linguisticswhere expert statements are required about the cognacy of items-and these modern approaches-which rely entirely on surface form for determining identity of items-although closer to the latter than the former. In this way, the monograph also makes a contribution to the theoretical and methodological discussions of measuring linguistic distances, beyond providing empirical classification of the KST varieties.

The results of the comparison showed that the investigated KST varieties can be classified into three (or possibly four) groups, where the varieties spoken at Sangla, Nichar, Ropa and Kalpa form one group, and those of Poo, Kuno and Nako (Navakat) form another. The varieties of Chitkul and Labrang fall somewhere in between these two distinct groupings, being (separately) closer to one or the other group concerning some linguistic features, but distinct with regard to other linguistic features. In Chapter 5 , I also made a more detailed comparison between Kinnauri and Navakat on the basis of the richer linguistic data available to me on these varieties (see Chapters 2 and 3), which confirms the results of the broader comparison, specifically that Navakat (and consequently also the varieties of Poo and Kuno) should be placed together with the Tibetan varieties, rather than under the West Himalayish node of Sino-Tibetan. The combined evidence of this study thus supports a grouping of the nine investigated KST varieties approximately like the one shown in Figure 23 (= Figure 18 in Chapter 5).

In Chapter 6, I investigated the relationship between Kinnauri and Kinnauri Pahari, which took us into the realm of language contact and areal linguistics. This investigation shows that both Kinnauri and Kinnauri Pahari exhibit linguistic features characteristic of the other language, but in many cases it seems


FIGURE 23 Lower-level classification of the investigated KST varieties (branch lengths are not significant)
most reasonable to posit wider areal influences as the reason for the similarities, rather than direct borrowing between the two languages. A particular confounding factor is the existence of less prestigious-Kinnauri Pahari and other languages of the so-called scheduled castes-and more prestigious-above all the state and national language Hindi-Indo-Aryan varieties in relationship to Kinnauri. Since these Indo-Aryan languages share many features by virtue of being closely related, it is not always possible to determine which sociolinguistic configuation is responsible in every particular case of borrowing into Kinnauri.

The results of the investigation of the linguistic structures discussed in Chapter 6 can be summarized as in Table 74 (= Table 73 in Chapter 6). The terms MAT (replication of linguistic matter, i.e., linguistic form or substance) and PAT (replication of linguistic linguistic pattern or structure) are due to Matras and Sakel (2007).

Except for the inclusive-exclusive feature, irrespective of the direction of influence, the spread of features is wider than just restricted to the contact between Kinnauri and Kinnauri Pahari in the Sangla region.

In all the instances where Kinnauri exhibits the "Indo-Aryan" pattern, it distinguishes itself from Navakat. This again confirms the conclusions from Chapter 5 . If one were to plot isoglosses for the KST varieties, they will divide the region into at least two parts, where the Sangla area as a whole (or Kinnauri in particular) and Navakat will end up separated by a large number of isoglosses; it is very likely that the isoglosses delimiting Kinnauri will group it with other West Himalayish languages such as Kanashi.
table 74 Borrowing between Kinnauri (ST) and Kinnauri Pahari (IA)

| Type of borrowing | Feature | Direction |
| :--- | :--- | :--- |
| MAT and PAT | Names of the days and months | IA > ST |
|  | Agentive nominalizer | unclear |
| PAT (and partly MAT) | 'mouth'/'face' | ST > IA |
| PAT only | 'yesterday'/'tomorrow' | ST > IA |
|  | Source of aspect markers | IA > ST |
|  | The finite verb structure | IA > ST |
|  | Inclusive-exclusive distinction | ST > IA |
| Convergence of PAT | Higher numeral system | - |

This concludes our overview of the linguistic situation of Kinnaur. Hopefully I have been able to add to the linguistic documentation of the languages of Kinnaur-in particular Kinnauri, Navakat, and Kinnauri Pahari, but also in some degree of other varieties spoken within its borders. I also hope to have been able to shed some further light on the genealogical and areal connections among the languages of Kinnaur and also those spoken in the larger context of the western part of the Indian Himalayas.

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## Index

In this index, genealogical classification information is provided for languages and language subfamilies. Thus, "Kanashi (ST)" refers to the Sino-Tibetan language Kanashi, and "Western Pahari (<IA)" is the Western Pahari subfamily/branch of the Indo-Aryan language family (which in turn forms a branch of Indo-European). For obvious reasons, the language families Sino-Tibetan (ST) and Indo-Aryan (IA), and the languages Kinnauri, Kinnauri Pahari, and Navakat are not indexed, although some of the subbranches of ST and IA are.
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[^0]:    https://www.eva.mpg.de/lingua/resources/glossing-rules.php.
    2 Although in paradigm tables and the vocabulary appendices, alternatives are separated by commas and semicolons, and in the interlinear glossed examples, a forward slash is used.

[^1]:    1 However, in Section 5 below, "Kinnauri" refers specifically to the (self-reported) language label found in national census data.
    2 The situation is improving; in addition to this volume, there is some recent work on Shumcho by Huber (2014a, 2014b, 2019) and a PhD dissertation on Chhitkuli by Martinez (2021).

[^2]:    6 A clear illustration of this is provided by Gerard (1841: 28): "In Chinese Tartary it [the Satluj river] is called Langzhing-Khampa [...], and near Numgea its usual name is Muksung, [...] lower down, Sampoo, Sangpoo, and Sanpo, [...] At a sandy place below Murung, [...] it is commonly Zung-Tee; [...] In the lower parts of Koonawur, its only appellation is Sumudrung, or the river. Near the capital of Busehur it is called Sutroodra, or Sutoodra."

[^3]:    7 This village is now called Kalpa.
    8 Sources: (i) Census 1971. Series-7 Himachal Pradesh. District census handbook. Parts X-A \& B. Town \& Village directory. Village \& townwise primary census abstract. Kinnaur district; (ii) Census of India 1981. Series-7. Himachal Pradesh. District census handbook. Parts XIII-A\&B village \& town directory. Village \& townwise primary census abstract. Kinnaur district; (iii) Census of India 1991. Series-9. Part XII-A \& B. District census handbook. Kinnaur. Village \& town directory. Village \& townwise primary census abstract; (iv) online 2001 and 2011 census data from http://www.censusindia.gov.in.

[^4]:    9 In the 1971 and 1981 census handbooks all villages which were included in the report were inhabited villages, while in the 1991, 2001 and 2011 census handbooks the total number of villages included both inhabited and uninhabited villages. According to the 1991 census, the total number of villages were 662 , of which 228 villages were inhabited and 434 were uninhabited, and the proportions have remained approximately the same in the later censuses.

[^5]:    11 Santosh Negi (p.c) and Padam Sagar (p.c.).

[^6]:    12 For the sake of consistency I use the label "Kinnauri Pahari" in this table. The acronym SC (scheduled caste) is used in the population tables in the census reports.

[^7]:    13 People who have indicated Kinnauri as their mother tongue. This number may not necessarily include all KST speakers.

[^8]:    14 The source of information for this section is: The statement-8 Growth of non-scheduled languages-1971, 1981, 1991, 2001 and 2011 (source: http://www.censusindia.gov.in).

[^9]:    15
    Of the total 14,928 speakers of Kinnauri who claimed to be monolinguals, 9,310 were women and 5,618 were men.

[^10]:    1 The names provided here are the official names of these villages (www.census2011.co.in). See Chapter 1 for details concerning the size of the population, number of speakers and other such details.

[^11]:    2 This chapter elaborates, revises in part and extends a much shorter and considerably less detailed earlier description of Kinnauri which appeared as Saxena (2017), in the second edition of the survey volume The Sino-Tibetan languages (Thurgood and LaPolla 2017).
    3 The articulation of $v$ is labio-dental rather than bilabial.

[^12]:    4 The same phenomenon occurs in Kinnauri Pahari；see Chapter 4.

[^13]:    $5 d$ is, however, normally neither realized as a fricative/spirantized nor as a prototypical stop in these positions. Its articulation is somewhere in-between stop and fricative.

[^14]:    6 In the Tukpa variety a short [r] is also heard after a [d] (dzogits 'warm (weather)': [3(r)ogits]). In addition, $d z$ is realized as [ z$]$ more frequently in the Tukpa variety than in the Razgramang variety.

[^15]:    7 This example shows that [r] can also intrude in reduplicated perfective verb forms, where it is in word-medial position.

[^16]:    8 Notably, several of these items are IA loanwords in Kinnauri.

[^17]:    9 A reviewer suggests that these alternations together indicate that we are dealing with an original stem-final -t. Notably, Shumcho has a number of ST verbs which in some morphological contexts show a final $-t$, which Huber (2014a: 232 f./fn. 17) refers to as a "root augmentation marker". Shumcho also has an intransitive marker -(e)t (Huber 2014a: 252 f./fn. 33) which may be related to Kinnauri -e/-ed/-en (described in Section 4.1.3.4.2). On the other hand, note that Navakat, too, shows the stem sád- for 'to kill' (and not *sát-); see Chapter 3.

[^18]:    -dz occurs obligatorily when 'brother' and 'sister' occur independently, but is not permitted when they form part of a compound.
    13 ban 'papa', man 'mama' (source: Joshi 19o9).
    14 -s occurs also in complex verbs. E.g. [tiskarmu] 'to be thirsty' ti-s-karmu [water-Lnkbring.InF].
    15 Kanashi has a similar compound construction where $-\int$ occurs as the linking element: jai-f-ba: [mother-Lnk-father] 'parents'.

[^19]:    17 In natural speech the masculine form occasionally occurs with female referents.
    18 The contrastive specifier -sja:/-se: is distinct from the agentive nominalizer -tsja:/-tse:. The agentive nominalizer is affixed to a verb while the contrastive specifier is affixed either to a noun (animate male or female), a pronoun, or an adjective when not followed by a noun.
    19 Since the head noun is the last constituent of the NP, establishing the status of the case markers as noun suffixes or NP clitics would require more data (non-nominative marked NPs with extraposed constituents after the head noun). In two cases-dative (-) $p \partial \eta$ and comitative (-)rəך-the markers show word-like prosody in some individual instances.

[^20]:    20 The ergative marker -is [is] represents the speech of Mrs Jwala Sukhi Negi (from Brua), while [əs] represents the speech of Ribba and its surrounding region.
    21 One exception is maymu 'to dream', which permits the ergative marking but not a direct object argument: ram-is may~may [i.name-ERG dream~PFV] 'Ram dreamt.'; ra:m-u may-zm de $\sim d e ~[i . n a m e-D A T ~ d r e a m-N M L z ~ f e e l . i n t e r n a l l y(I N T R) ~ ~ P F V] ~ ' R a m ~ h a d ~ a ~ d r e a m ' . ~$ The literal interpretation of rucka is 'old'. It occurs with masculine, animate head nouns (e.g. rudza mi 'old man', rudza dames 'old ox'). In natural discourse rudza also occurs by itself, without its head noun. It then has the interpretation of 'an old, frail, pitiable man'. For this reason, it is glossed here as 'o.man'.

[^21]:    27 Exceptions are [2DU.NHON] and [2DU.HON], where the dative marker is always -nu.
    28 mi-nu [man-DAT.PL] is also permissible here.

[^22]:    54 gui here, as also in constructions such as gui dja:r 'whole day', emphasizes the long duration.

[^23]:    61 tug is the standalone form and the allomorph rug is used when part of a complex numeral (see Section 3.5.2).
    62 ira is a regularly formed compound from id 'one' and $r a$ 'hundred', with loss of the final consonant of $i d$ (see Section 3.2.1.2).

[^24]:    67 Both [ra:dja] and [ra:za] 'king', are found in Kinnauri. The former reflects a more direct influence of its Hindi pronunciation. The same is the case with other IA loanwords with [z] in Kinnauri.
    68 The dative marker on 'flowers' is obligatory.
    69 The dative marker on 'flower' is obligatory.

[^25]:    (206) lama:dji kim-o bjo-f
    lama. H house-LOC go-H
    'The honorable lama went home. (Direct knowledge)'

[^26]:    97 This example represents the speech of the Brua village.
    98 This -le: is distinct from the emphasis marker -le.
    $99-e$ is an affectionate vocative marker which occurs with some kinship terms, e.g., $t^{h} a \eta-t s-$ $e$ [child/son-DIM-vocative], douts-e [o.sister-vocative], ama-ts-e [mother-dIM-vocative], pa:ts-e [grandchild-vocative], beits-e [younger.sibling-vocative]. It does not occur with other common nouns than kinship terms, nor with proper nouns.

[^27]:    100 rudzats indicates a pitiful old man.

[^28]:    $101 d u$ is preferred here.
    $102 d u$ is preferred here.

[^29]:    103 A compound: Hindi kot-ka [wood-poss] and Kinnauri hoy 'insect'.

[^30]:    104 The name of a festival which marks the beginning of a new year.

[^31]:    1 Nako is traditionally an important place for Buddhists in Western Himalaya. There are at least seven temples from different periods in and around Nako, including a monastic complex. Some temples of this monastic complex are claimed to be from the first half of the 12 th century (Luczanits 2003). Buddhists come from far off places to visit Nako. The Nako lake (3,662 metres above sea-level), too, is regarded as a sacred lake by Buddhists.
    2 The highest peak near Nako is Leo Pargil (6,791m). It is situated to the east of the Nako village.
    3 For access to areas close to the Indian border with China an inner line permit is required. In Kinnaur this applies to parts of Upper Kinnaur (e.g., Nako), while areas in the Lower Kinnaur region (e.g., Sangla, Reckong Peo, Kalpa) do not require this permit.
    4 Source: Census of India online (retrieved in July 2016).
    5 This is also the case in some other Tibetan communities, for instance, the gara ('blacksmith') community in Ladakh.

[^32]:    6 When interacting with people from outside Kinnaur, the local Nako villagers refer to themselves as [kínəra] (if the speaker is a man) or as [kínərri] (if the speaker is a woman). When they communicate with people who are from Middle and Lower Kinnaur (see Chapter 1), they communicate in Hindi and describe themselves as coming from the Nako village. But when they communicate with people from Upper Kinnaur, they refer to themselves as nàova (see Section 3.2.3) and their village as nàu.

[^33]:    7 The articulation of $\int$ actually varies between [ [] and [s]. The same is the case concerning the articulation of 3 .
    8 See the separate discussion of prenasalization in Section 2.1.1 below.

[^34]:    9 "Word-final" is perhaps not the best characterization, since this phenomenon seems to occur also at some word-internal morpheme boundaries (e.g. [tùtpa], $t$ hỳtpa 'smoke', [zèttfa] 'to forget', $k^{h}$ ofak'-re [3PL.nh-refl]).

[^35]:    11 I.e., plain segments vs. segments with preradicals in written Tibetan.
    12 Some phonological correlates to tone split noted in Sino-Tibetan languages are: breathy voice, prenasalization, fortis and lenis articulation of consonants, vowel length, and tenseness (Hombert 1978).

[^36]:    13 A variant of the locative marker ${ }^{n} d u$.
    $14 t t_{i}^{\prime} k \sim t_{i} i k$ is preferred here, though a single $t j i k$ is also possible.

[^37]:    15 The Nàvakat word for 'name' is min. In this regard, Nàvakat differs from its closely related languages, where the term for 'name' is miy.

[^38]:    19 This corresponds to the concept $d \bar{a} k i n \bar{\imath}$ in Sanskrit.

[^39]:    23 As seen above, -mo also occurs in nouns which do not have female referents.

[^40]:    24 tá is the generic word for 'horse'. It is frequently used to refer to both stallions and mares. But, when one wants to specify if a horse is 'mare' or a 'stallion', támo and tápo are used.

[^41]:    25 The double derivation seen in some of these formations could possibly be a comparatively new development after the masculine form had ceased to be productive.
    26 Notice a short $k$ before $p$ here.
    27 Though pítiva is acceptable, speakers prefer pítija.
    28 There were no examples of the ergative marker with intransitive verbs in my material. More work is needed here.

[^42]:    29 "Objective" would perhaps be a more apt name, but I follow a long tradition in the description of South Asian languages, where "dative" designates a case which can appear on both direct and indirect objects, and in the so-called "experiencer subject" construction.

[^43]:    30 In Navakat クǿnpo 'blue' (and not ( ${ }^{n}$ )dzénu 'green') is the color of grass and vegetation.
    31 jòk literally means 'below'. Since the cities (e.g. Rampur, Shimla) are located lower than Nako, jòk is also used nowadays to refer to a 'city'.

[^44]:    32 The slow-speech form is màfak=i.
    The slow-speech form is $k^{h} o ́ f a k=i$.

[^45]:    40 tápo is used with flat objects, for example, tables, books, mattresses. $t^{h}$ ámo, on the other hand, is used with cylindrical objects, for example, cylinders, pillars, pipes, pencils.

[^46]:    43 girgir is used when the focus is on how large and round the object is. kírkir describes small, round objects.

[^47]:    44 The final vowel of 'surface' is nasalized due to the prenasalization of 'soft'.
    45 [ngjòfa].

[^48]:    47 sã: has an audible nasalization, though there is no nasal consonant following the vowel.
    48 [クòعvã:k̄].

[^49]:    49 This is not realized as [ $3^{\mathrm{h}} \mathrm{ak}$ ], which is the case in some other related linguistic varieties.
    50 These elements largely coincide with those used in (Lhasa) Tibetan, and also seem related to the multipliers of the corresponding decades where they appear.
    51 Historically, the morpheme is so. The $k$ in sok is the migrated prefix of gcig.
    52 One possible analysis of $\eta$ éptfu is $\eta$ á- $p-t f u$, where - $a$ becomes -e because of the vowel following it.
    53 Both tokjik and tonfik are possible here, with no difference in meaning.

[^50]:    but at times it is also realized as $[(k) \varepsilon n]$ or $[(k) e n]$. This also holds true for other inflectional endings: [(u)an] [PST.EGO] and [at] [PRS.EGO].
    The copula dèt is realized here as dè.

[^51]:    63 This is also realized as riybo.
    64 This is also realized as là̀:fo.
    65 The detailed form is: mà $f a k=i$.
    66 [dàk].

[^52]:    67 -van is also realized as -pan. For example, tfák-pan 'break-PST'.

[^53]:    69 nát thák seems to function as a compound. The possessive marker is not possible after ná in ná $t^{h}$ ák.

[^54]:    perfect construction in Ladakhi (Bettina Zeisler, p.c.).

[^55]:    71 This is an example of a complex (or serial) verb construction with a sequence of two verbs without any intervening non-final particle.

[^56]:    90 In compiling the information presented in this appendix I have benefitted greatly from discussions with Bettina Zeisler.

[^57]:    93 It seems Navakat is regularizing a system where 'older' and 'younger' appear also as modifiers, redundantly in addition to the noun which already in itself specifies if it is an older or a younger relative.
    94 gètpo and gètmo are also used to refer to old animals, but not for inanimate objects for which there is a separate word for 'old'.
    95 This is also used to refer to older men in general, including those who are not related by kinship.

[^58]:    101 This is also realized as [ $p^{h}$ ètfa] and [bètfa].

[^59]:    102 The only difference between the TR and INTR form is in the tone.
    103 The only difference between the TR and intr form is in the tone.
    104 The only difference between the TR and INTR form is in the tone.

[^60]:    105 The only difference between the TR and intr form is in the tone.
    106 The only difference between the TR and INTR form is in the tone.

[^61]:    107 The only difference between the TR and Intr form is in the tone.
    108 kámaij is an IA loanword.

[^62]:    109 This occurs to describe, e.g. 'after you', 'after 5 o'clock'.
    110 mámõ is also used to refer to 'city', as all large cities in Kinnaur are to the south of (and consequently below) Nako.

[^63]:    111 The only difference between the vol and nvol form is in the tone.

[^64]:    112 In Nako today most people use a mixture of English and IA terms for the days of the week. Only those who have a training in Buddhism use the terms provided here for the days of the week.
    113 Both pleasant and unpleasant smell.

[^65]:    115 [forehead-very.good].

[^66]:    116 gò- $k^{h} i$ [door-dog].

[^67]:    117 Concerning concrete things, e.g. 'I don't remember where I put my keys?'.
    118 It also has the interpretation 'approximately'.
    119 It also has the interpretation 'approximately'.

[^68]:    120 Only monks play this musical instrument.

[^69]:    $121 t^{h u}$ kpa refers only to small conflicts, dà t thúkpa may also refer to large conflicts, wars etc.

[^70]:    122 This is also realized as [gònba].

[^71]:    123 This exists in a spirit form. It does not have a physical form, like a human body.
    124 This corresponds to the concept $d \bar{a} k i n \bar{c}$ in Sanskrit.
    125 brèk is an English loanword.

[^72]:    126 As official papers such as birth certificates are a new phenomenon in this community, they are simply called fú: meaning 'paper'.
    127 Also 'letter of the alphabet' (as in English).
    128 [milk.poss paper]. Plastic bags were introduced in Nako in the form of plastic bags containing dry milk. Now omi is used to refer to plastic (bags) in general.

[^73]:    * I would like to express my gratitude to the Kinnauri Pahari speakers for their help and for sharing their knowledge of Kinnauri Pahari with me. I would also like to thank professor Stig Eliasson for his comments on the section on the sound system of Kinnauri Pahari, and to Anna Sjöberg for her help with the spectrograms. Notational conventions: long vowels are indicated with a following IPA length sign (:) both in the phonetic transcription and the phonemic orthography adopted in this chapter, but long consonants are written doubled in the latter ( $t^{\text {h }}$ umma: [ $\mathrm{f}^{\text {h }}$ um:a:] 'walking stick'). Stress normally falls on the first syllable of a word, and will not be explicitly marked in such cases. However, a small number of di- and polysyllabic words carry a strong secondary stress on one or several following syllables, and there is also a perceptible syllable break, which will be indicated in the phonetic transcription, but not in the phonemic orthography: $t \varepsilon t \varepsilon$ ['te., tz] 'grandfather'. Phonetic transcriptions are used for illustrating details of pronunciation, and also-together with a phonemic representationfor showing alternative, different pronunciations to that implied by the phonemic representation.
    1 According to the District census handbook: "The Scheduled Castes and Scheduled Tribes are those castes and tribes which have been notified as such by the Presidential Order in accordance with the Article 341 and 342 of the constitution." (source: 1991 District census handbook, p. 4). See also Chapter 1.

    2 Note that these figures refer to the "scheduled caste" category, and not directly to language. The 2011 census reports only 2,918 Pahari mother-tongue speakers in Kinnaur ( 1,735 male and 1,183 female). Presumably many Kinnauri Pahari speakers have reported their language as Hindi. See Chapter 1 for information about the complicated nature of the Indian census reporting and tabulation.

[^74]:    4 Similar variation is also found in Kinnauri.
    5 According to our language consultant this is in free variation.

[^75]:    6 This is the case also in Kinnauri (tete 'grandfather'), including a slight break between the syllables.

[^76]:    7 All these loanwords have been borrowed into Kinnauri Pahari via some other IA language (most likely Hindi).

[^77]:    11 gor hori is pronounced as one prosodic unit.

[^78]:    14 Traditionally, the derivational suffix -a:ni/-ni was used to indicate the wife of a man with the profession denoted by the base word.
    15 In allegro pronunciation these feminine forms drop the last stem vowel before the derivational suffix (e.g., maftra:ni 'teacher (F)').

[^79]:    17 Since the head noun is the last constituent of the NP in Kinnauri Pahari, an alternative

[^80]:    27
    There is apparently no difference in meaning between da:ldis and gari:b.

[^81]:    38 At times, it is also realized as $-d \varepsilon /-n d \varepsilon$.
    39 In Kotgarhi -ndo functions as a participial marker (Hendriksen 1986: 6o).
    40 This is also the case in the closely related language Sirmauri Dharthi (Grierson 1928).

[^82]:    $41-i$ is realized as $-j i$ after stems ending in $-a$. The articulation of $-i$ is barely audible in fast speech.

[^83]:    43 It is plausible that $-i$ in $n \varepsilon i$ is the same as the perfective $-i$ discussed in the preceding section.
    There is one example in my data, where ma- occurs in a non-prohibitive construction: mãẽ $k^{h} a u m a-k^{h} a-j i$ 'I did not eat.'
    The regular copula forms $s a /=s$ are not permitted here with third person subjects.

[^84]:    47 The case marker la is obligatory here, and also in (224-225). Further, dzas can be replaced by dzin in examples (223-224).

[^85]:    52
    All these can occur in a sentence such as: 'He has a lot of fields'.
    53 Both can occur to describe, e.g. half of an apple.

[^86]:    1 The first four villages are situated in Lower Kinnaur, Kuno and Labrang are located in Middle Kinnaur, while the last three are villages of Upper Kinnaur (see Chapter 1).

[^87]:    2 Because the investigations described in this chapter were conducted before undertaking the more detailed phonological analysis underlying the phonemic orthography used in Chapter 2, the transcription system used for (Sangla) Kinnauri in this chapter for all lexical comparisons differs in some details from that used in Chapter 2. However, in the interest of verifiability and reproducibility of results, we have elected to retain the earlier, less phonemic transcription here.

[^88]:    3 No verbs are included in the comparisons. Verbs were included in the basic vocabulary questionnaire (see Appendix 5A to this chapter), but were provided in such a variety of different (basic) forms by language consultants, that it was not feasible to attempt to harmonize them at this stage, without much more knowledge of each of the varieties.

[^89]:    4 Kuno is not unique in this respect among ST languages. Mazaudon (2010: 124-131) describes parallel decimal and vigesimal numeral systems in Dzongkha (dzo), and a similar situation is found in Bunan (bfu) (Widmer 2017) and Kanashi (xns) (Saxena and Borin 2022a).

[^90]:    5 Written Tibetan: stonं 'thousand' (Bielmeier et al. MS 2008).
    6 The term "base" is used here to refer to the number system base, 10 or 20 in the KST varieties under discussion, and its multiples.
    7 The elements added between tens and ones in Poo and Nako resemble those of the (Lhasa) Tibetan system, where a different element is used for each decade (Bell 1939: 68f.). See also Chapter 3, Section 3.5.

[^91]:    8 We have more detailed data of Kinnauri, which exhibits a range of third person pronominal forms (see Chapter 2). The forms found in the various KST varieties of the Sangla group show some similarity with one or the other form found in Kinnauri. The only exception is Ropa, which has ono as the third person singular pronoun. This form is not found in Kinnauri.
    9 Out of all the KST varieties investigated, the data on the Sangla variety is the most extensive (see Chapter 2).

[^92]:    10 Third person non-anaphoric pronouns (in object form) in Sangla are, for example, $h u d u$, do-u.

[^93]:    11 Parallel entries for all three dialects are found for many, but not in all cases.

[^94]:    12 An exception in this regard is Webster (1991).

[^95]:    1 Kinnauri and Kinnauri Pahari are the means of communication in respective "in-group" contexts. Kinnauri is traditionally the lingua franca of this region, a practice which continues to date among older people.
    2 Although calling it "non-recent" glosses over the fact that we still do not know much about the linguistic prehistory of this area. For example, different clans among the Kinnauri speakers in the Sangla region are said to have migrated into Kinnaur from different parts of lower Himachal Pradesh. In some cases the members of these clans are still known by the names of the villages in lower Himachal Pradesh which they are said to have migrated from.
    3 Indus Kohistani (Zoller 2005) which belongs to the IA Northwestern zone, spoken in northern Pakistan has a division of the year into months which is similar to English or Tibetan, but with its own terms. The words for the days of the week, too, are strikingly different in Indus Kohistani from other IA languages such as Hindi.
    4 As described in Chapter 2, a set of IA nouns in Kinnauri take the adaptive marker -ay.

[^96]:    5 Kotgarhi, like Kinnauri Pahari, belongs to the Western Pahari subbranch of IA, and is used as a stand-in for Kinnauri Pahari in this table. Hindi, too, is an IA language. The Kotgarhi and Sanskrit data presented in this chapter are from Hendriksen (1976, 1986). When data is from a secondary source, its original language name and transcription is retained in this chapter. Hindi data is from my own native-speaker knowledge of the language.

[^97]:    languages (funded by the Swedish Research Council 2003-2005) in collaboration with the Central Institute of Indian Languages. I would like to thank our language consultants, especially Mr. Rajesh Thakur and Mr. Nandlal for their enormous knowledge and patience and co-operation.
    7 Another West Himalayish language spoken in Himachal Pradesh, Gahri (Bunan), also has a similar form: somra 'Monday' (D.D. Sharma 1989).
    8 The names of the months, provided here, occur frequently in everyday Navakat speech, but the Navakat names of the days provided in Table 63 are seldom used in modern times in everyday speech. According to my language consultant (Padam Sagar), reference to days is not so common in everyday speech in Nako. Reference to day names occur mostly in the speech of schooled adults or school-going children, who tend to use the corresponding Hindi names instead. Some other ST languages, e.g. Lotha (Acharya 1983), Tangkhul Naga (Arokianathan 1987) and Angami (Giridhar 1980), too, have the Tibetan/English calendar system.

[^98]:    11 Sources for the data in Table 66: Turner (1966): Bhojpuri, Gujarati, Maithili, Oriya, Pali, Prakrit, Pashai Dardic, Sindhi, Sinhalese. Chinali is from D.D. Sharma (1989). Jaunsari is from Satish (1990). Information about the remaining languages comes from the digital South Asian dictionaries at http://dsal.uchicago.edu/dictionaries/, and the South Asian IDS/LWT lists at https://spraakbanken.gu.se/en/projects/digital-areal-linguistics (Borin et al. 2013).

[^99]:    20
    While Kanashi (source: own fieldnotes) exhibits both systems—decimal and vigesimal— Raji (source: Shree Krishan 2003) has borrowed the IA numerals from seven onwards.

[^100]:    21 Even though the gender category in these languages is inherited from Old IA (and through it from Proto-Indo-European), these endings themselves are specific IA innovations (Masica 1991: 222).

[^101]:    27 Evidentiality is, however, found in both Kinnauri and Navakat, though the two languages have distinct evidential forms. Evidentiality is less developed in Kinnauri as compared to Navakat.

