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The Verbal Morphology of Dumi Rai Simplicia

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Dumi Rai is a 'complex pronominalizing' Kiranti language spoken in *Khoṭāṅ* district, *Sagaramāthā* zone, in eastern Nepal.

A verb in Dumi Rai may have one or more different stems. Dumi verbs may be divided into various conjugations on the basis of paradigmatic stem alternation. A conjugation therefore is a fixed pattern of stem alternation, not a fixed set of inflectional affixes. The inflectional affixes of the intransitive, transitive and reflexive paradigms are constant throughout all conjugations. Once the conjugation of any given verb has been specified, it is predictable which stem will occur in a given inflected form.

A single stem may have one or two phonologically conditioned forms, an ante-vocalic form and an ante-consonantal, ante-pausal form. Before a consonant or word-finally: (1) a post-syllabic augment is not realized, (2) /d/ is devoiced, and (3) an aspirated final is de-aspirated.

In this article, a synoptic account will be given of Dumi Rai conjugations, and a morphological analysis will be provided of the verbal affixes in Dumi Rai simplex forms. Simplicia are non-periphrastic indicative forms without an overt aspect marker.

ABBREVIATIONS

1	first person	s	singular
2	second person	d	dual
3	third person	p	plural

→ indicates the direction of a transitive relationship

A	agent (of a transitive verb)
P	patient (of a transitive verb)
S	subject (of an intransitive verb)

PT	preterit	pf	prefix, prefixal slot
NPT	non-preterit	sf	suffix, suffixal slot
ø	zero	Σ	stem

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§1. Conjugations

A conjugation in Dumi Rai is defined as a fixed pattern of stem alternation, not a fixed set of inflectional endings. Five intransitive conjugations, eleven transitive conjugations and one reflexive conjugation must be distinguished to account for the different patterns of stem alternation in Dumi Rai verbs.

In a glossary entry, the conjugation of a verb and its various stems must be specified. The conjugation of an intransitive verb is indicated as: vi-1, vi-2, vi-3, vi-4 or vi-5. The conjugation of a transitive verb is indicated as: vt-1, vt-2a, vt-2b, vt-2c, vt-3, vt-4, vt-5a, vt-5b, vt-6a, vt-6b or vt-7. A reflexive verb is indicated as: vr, and the glossary entry of a reflexive verb must specify whether its subject is in the ergative case, like the agent of a transitive verb, or is in the absolutive case, as is the subject of an intransitive verb and the patient of a transitive verb.

Once a verb's conjugation has been specified and its various stems have been provided, it can be predicted which stem it will have in a given inflected form. For example, the transitive verb *dzi·tnɨ* "to make wet" is specified as belonging to conjugation vt-2a, and its stems are given as *dzi·t-dzi·tš/dzi·š*. For verbs of conjugation vt-2a, forms with a first singular agent take the first stem or Σ_1, *dzi·t*, and forms with a first singular patient take the second stem or Σ_2, *dzi·tš/dzi·š*.

dzi·t-nta.	I'll make you^{s} wet.
dzi·t-u.	I made him wet.
dzi·tš-əɲɨ.	They^{P} made me wet.
dzi·š-tə?	Will you^{s} make me wet?

In certain instances, finite forms may have formally identical affixes but take different stems:

a-dzi·t-ini.	You^{s} made them wet (2s→3p).
a-dzi·tš-ini.	You^{P} made him/them wet; he/they made you^{P} wet (2p→3/3→2p).

In verbs with an invariable stem, i.e. verbs of the first conjugations, vi-1 and vt-1, finite forms bearing formally identical affixes are alike:

a-dɨm-ini.[1] You^{s} met them (2s→3p).

a-dɨm-ini. You^{P} met him/them; he/they met you^{P} (2p→3/3→2p).

A parallel situation exists in German with certain apophonic verbs as compared to weak verbs. For example, the present indicative endings of the third singular and second plural are both *-t*. In certain verbs with Umlaut, the third singular and second plural have different stems:

Er schläf-t. He is sleeping.
Ihr schlaf-t. You^{P} are sleeping.

In regular verbs, both these finite forms are alike.

Er sag-t. He says.
Ihr sag-t. You^{P} say.

Unlike German, but as in Russian or French, stem alternation in Dumi Rai may involve stem vowel, stem final or both. The phenomenon of stem alternation is known in Russian as чередование основ.

(1) stem vowel affected

ɔŋ-nɨ to enter
uŋ-tə I enter
ɔŋ-kɨtə we^{pe} enter
uŋ-ə he came in

hɔ··-nɨ to come
hu··-tɨ we^{de} shall come
ə-hu··-yi you^{d} came
həm-hɔ··-tə they'll come

(2) stem final affected

dhyək-nɨ to plug up
dhyəkh-ɨ we^{de} plugged it up
ə-dhyəkt-ɨ you^{s} plugged it up
ə-dhyəkh-ini you^{P} plugged it up
dhyəkt-u I plugged it up

phɨn-nɨ	to dig up by hand
phɨntš-ɨ	we^{de} dug it up
a-phɨnd-ɨ	you^{s} dug it up
a-phɨntš-ini	you^{p} dug it up
phɨnd-u	I dug it up

(3) both stem final and stem vowel affected

kɔp-nɨ	to thatch
kuph-ɨ	we^{de} thatched it
a-kɔpt-ɨ	you^{s} thatched it
a-kuph-ini	you^{p} thatched it
kɔpt-u	I thatched it
hɔ·t-nɨ	to fetch
hu·tš-ɨ	we^{de} fetched it
a-hu·d-ɨ	you^{s} fetched it
a-hu·tš-ini	you^{p} fetched it
hɔ·ʔkta	we^{pe} shall fetch it

It is important that the distinction between different stems of a single verb and different forms of a single stem be kept in mind. Different stems are distributed according to fixed patterns of paradigmatic stem alternation called conjugations, whereas different stem forms are forms of a single stem phonologically conditioned by the presence or absence of a following suffix.

Before any consonant-initial suffix and word-finally:
(1) a post-syllabic augment is not realized,
(2) final */d/* is devoiced, and
(3) final */ph/* and */kh/* are de-aspirated.

$$\left[\begin{array}{c} C_1C_2 \rightarrow C_1 \\ d \rightarrow t \\ \left\{\begin{array}{c} ph \\ kh \end{array}\right\} \rightarrow \left\{\begin{array}{c} p \\ k \end{array}\right\} \end{array}\right] / \_\_ \left\{\begin{array}{c} C \\ \# \end{array}\right\}$$

e.g.	*bənd-u*	I felt it
	bən-tə	I feel it
	ɨd-u	I roasted it
	ɨt-tə	I'll roast it
	ha·kh-u	I opened it up
	ha·k-tə	I'll open it up.

Moreover, the following morphophonemic rules apply to stem finals:

$$\left\{ \begin{matrix} nt\check{s} \\ t\check{s} \end{matrix} \right\} \rightarrow \check{s} \; / \; \_\_ \; t$$

e.g.	*hɨtš-i*	we^{di} burned it
	hɨš-ti	we'll^{di} burn it
	a-bəntš-ini	you^{p} felt it
	a-bəš-tini	you^{p} feel it

$$Vt \rightarrow V? \; / \; \_\_ \; k^{2}$$

e.g.	*hɨt-tə*	I'll burn it
	hɨ?-kta	we'll^{pe} burn it

Stems with */ɨ/* as stem vowel and a single stem-final consonant are subject to limited vowel harmony in that the stem vowel */ɨ/* becomes */u/* in 1s→3s/PT forms, apparently under the influence of the 1s→3/PT suffix <*-u*>, e.g. *hɨtnɨ* vt-2a *hɨt-hɨtš/hɨš* "burn", *hɨttə* "I'll burn it", *hutu* "I burned it"; *šɨlnɨ* vt-1 *šɨl* "hide, conceal", *šɨltə* "I'll hide it", *šulu* "I hid it". This vowel harmonic pattern is attested in seventeen vt-1 and vt-2a conjugation verbs.

In preterit (3→3)^{d} and preterit 2s→3d forms, the d23 morpheme <*-ši*> (§2.2.14) is suffixed directly to the stem. In verbs with stem final */t/*, the resulting sequence */tš/* is reduced to */šš/*. This regressive assimilation is optional in carefully enunciated lento speech but obligatory in allegro speech, e.g. *Mi dətši* "They^{d} warmed up by the fire" vs. *Mi dəšši* "They^{d} warmed up by the fire" (Nep. *uniharū duijanāle āgo tāpe*).

In the glossary of the forthcoming *Grammar of Dumi Rai*, each verb is listed under its infinitive form. In glossary entries, stems of a verb are are separated by hyphens; stem forms are separated by diagonal slashes. Even though the different stems of a particular stem can be predicted on the basis of the morphophonological rules put forth here, both ante-consonantal and ante-vocalic forms of each stem are given in glossary entries for the sake of thoroughness and ease to the reader:

hɨlnɨ vt-1 *hɨl*, mix, blend, mix up; Nep. *misāunu*,
khɔpnɨ vt-3 *khuph/khup-khɔp*, winnow; Nep. *niphannu*.
ři·pnɨ vt-2a *ři·pt/ři·p-ři·ph/ři·p*, 1) twine, braid (esp. *ři·bha* "rope"; may collocate with *dosam* "hair", but cf. *pyəknɨ*); Nep. *ḍorī bāṭnu*; 2) spool; wind a string, thread, etc. onto a spool; 3) wring out (patient is the wrung out water, not the clothes from which it has been wrung out); Nep. *baṭārnu*; 4) break someone's neck; twist something until it snaps.
ta·mnɨ vt-6a *ta·mta-ta·mtuy/ta·mtu-ta·mtɨ-ta·mtɔ*, (ponently aspectivized *ta·mnɨ* "immerse") dunk under, dip, plunge, immerse, sink; Nep. *ḍubāi rākhnu*; cf. *tšɨpnɨ*.
tšɔtnɨ vt-2a *tšɔt-tšutš/tšuš*, 1) move up; *Aŋa šɨ mɨ-bi tšɔtɨ* I moved the log up a bit further into the fire; Nep. *aghi sārnu*; 2) deride; get someone riled up, tease, mock (animate patient, e.g. dog, man, friend); Nep. *gījāunu, calāunu, jiskyāunu*.
yi·nɨ vi-2 *ye··-yi·y/yi·*, descend, come down; Nep. *māthi bāṭa tala āunu*; cf. *khuŋnɨ*, *tha·ñ'šinɨ*.

§1.1. Intransitive conjugations

The first conjugations of both intransitive, vi-1, and transitive, vt-1, verbs are characterized by an invariable stem for all forms of the simplex paradigm. The affixes of the intransitive paradigm are shown on the next page.

All other transitive and intransitive conjugations have more than one stem and are characterized by fixed patterns of stem alternation. The patterns characteristic of the various intransitive conjugations are illustrated diagrammatically on the following page. The first conjugation is not listed, since vi-1 verbs maintain a constant stem throughout the paradigm. I have arbitrarily chosen to designate the stem occurring in forms with a first singular agent or subject in any given conjugation as the first stem.

As stated above, patterns of stem alternation may involve the stem final, the stem vowel or both. Verbs with certain stem finals are found to exhibit only certain patterns of stem alternation. In other words, a verb's conjugation is somehow related to its stem final. My corpus contains at least 37 first conjugation intransitive verbs. Intransitive verbs of the first conjugation include open stems (without a final consonant) and closed stems with the following stem finals:

Patterns of Stem Alternation of the Intransitive Conjugations

vi-2

	NPT	PT
1s	Σ-*te*	Σ-*e*
1di	Σ-*ti*	Σ-*i*
1de	Σ-*ti*	Σ-*i*
1pi	Σ-*kiti*	Σ-*ki*
1pe	Σ-*kita*	Σ-*ka*
2s	*a*-Σ-*ta*	*a*-Σ-*a*
2d	*a*-Σ-*ti*	*a*-Σ-*i*
2p	*a*-Σ-*tini*	*a*-Σ-*ini*
3s	Σ-*ta*	Σ-*a*
3d	Σ-*ti*	Σ-*i*
3p	*ham*-Σ-*ta*	*ham*-Σ-*a*

vi-3

NPT	PT
Σ-*te*	Σ-*e*
Σ-*ti*	Σ-*i*
Σ-*ti*	Σ-*i*
Σ-*kiti*	Σ-*ki*
Σ-*kita*	Σ-*ka*
a-Σ-*ta*	*a*-Σ-*a*
a-Σ-*ti*	*a*-Σ-*i*
a-Σ-*tini*	*a*-Σ-*ini*
Σ-*ta*	Σ-*a*
Σ-*ti*	Σ-*i*
ham-Σ-*ta*	*ham*-Σ-*a*

vi-4

	NPT	PT
1s	Σ-*te*	Σ-*e*
1di	Σ-*ti*	Σ-*i*
1de	Σ-*ti*	Σ-*i*
1pi	Σ-*kiti*	Σ-*ki*
1pe	Σ-*kita*	Σ-*ka*
2s	*a*-Σ-*ta*	*a*-Σ-*a*
2d	*a*-Σ-*ti*	*a*-Σ-*i*
2p	*a*-Σ-*tini*	*a*-Σ-*ini*
3s	Σ-*ta*	Σ-*a*
3d	Σ-*ti*	Σ-*i*
3p	*ham*-Σ-*ta*	*ham*-Σ-*a*

vi-5

NPT	PT
Σ-*te*	Σ-*e*
Σ-*ti*	Σ-*i*
Σ-*ti*	Σ-*i*
Σ-*kiti*	Σ-*ki*
Σ-*kita*	Σ-*ka*
a-Σ-*ta*	*a*-Σ-*a*
a-Σ-*ti*	*a*-Σ-*i*
a-Σ-*tini*	*a*-Σ-*ini*
Σ-*ta*	Σ-*a*
Σ-*ti*	Σ-*i*
ham-Σ-*ta*	*ham*-Σ-*a*

l	*k/kh*	*ŋ*
ř	*p/ph*	*m*

The complete (non-negated) simplex conjugation of the verb *phɨkni* vi-1 *phɨkh/phɨk* 'get up, arise" is as follows:

1s	*aŋ*	*phɨktə*	*phɨkhə*
1di	*intši*	*phɨkti*	*phɨkhi*
1de	*antšɨ*	*phɨktɨ*	*phɨkhɨ*
1pi	*iŋki*	*phɨkkiti*	*phɨkki*
1pe	*aŋkɨ*	*phɨkkɨta*	*phɨkka*
2s	*an*	*aphɨkta*	*aphɨkha*
2d	*antši*	*aphɨkti*	*aphɨkhi*
2p	*ani*	*aphɨktini*	*aphɨkhini*
3s	*ɨm*	*phɨkta*	*phɨkha*
3d	*ɨmnɨ*	*phɨkti*	*phɨkhi*
3p	*hammɨl*	*hamphɨkta*	*hamphɨkha*

The second and third intransitive conjugation each distinguish a first (Σ_1) and a second (Σ_2) stem. In the second intransitive conjugation, vi-2, the Σ_1 occurs in the singular and in the second and third plural. The Σ_2 occurs in the dual and in the first plural. Intransitive verbs of the second conjugation are open stem verbs. Of the vi-2 verbs I have counted, five have the stem vowel */i/* in their Σ_2 forms and the lower stem vowel */e/* in their Σ_1 forms, and three have the stem vowel */u/* in their Σ_2 and the lower */ɔ/* in their Σ_1 forms.

The complete (non-negated) simplex conjugation of the verb *dze·nɨ* vi-2 *dze··dzi·y/dzi·* "speak, talk" is as follows:

1s	*aŋ*	*dze·tə*	*dze·ŋə*
1di	*intši*	*dzi·ti*	*dzi·yi*
1de	*antšɨ*	*dzi·tɨ*	*dzi·thiŋɨ*
1pi	*iŋki*	*dzi·kti*	*dzi·ki*
1pe	*aŋkɨ*	*dzi·kta*	*dzi·ka*
2s	*an*	*adze·ta*	*adze·*
2d	*antši*	*adzi·ti*	*adzi·yi*
2p	*ani*	*adze·tini*	*adze·ni*
3s	*ɨm*	*dze·ta*	*dze·*
3d	*ɨmnɨ*	*dzi·ti*	*dzi·yi*
3p	*hammɨl*	*hamdze·ta*	*hamdze·*

In the third intransitive conjugation, vi-3, the Σ_2 occurs in the first plural forms, whereas remaining forms are taken from the Σ_1. My corpus contains at least 29 third

conjugation intransitive verbs. The difference between the Σ_1 and Σ_2 of third conjugation verbs involves either the stem final consonant, the stem vowel or both. Stem alternation in third conjugation verbs involving the stem final only is characteristic of verbs with the stem vowels */a·/*, */u·/*, */i/* and */ɨ/*. Stem alternation involving the stem vowel only occurs in verbs with the final consonants */m/*, */ŋ/*, */ř/*, */ph-p/* and */kh-k/*. Stem alternation involving the stem vowel, with or without involving the stem final, entails lowering of the vowel in the Σ_2:

i-ɛ
u-ɔ
u-ə
ə-a

Stem alternation involving the stem final, with or without involving the stem vowel, includes the following pairs of alternating finals:

tš/š-t
tš/š-ø
ntš/š-t
ŋ-ø

The complete (non-negated) simplex conjugation of the vi-3 verb *bɔtnɨ* is as follows:

bɔtnɨ vi-3 *butš/buš-bɔt*, 1) shout, cry; crow (of a cockerel); Nep. *karāunu*; 2) get riled up, be aroused (in the expression: *-tšili bɔtnɨ* "be angered, get angry" e.g., *otšili butša* I got angry); Nep. *rīs uṭhnu*.

1s	*aŋ*	*bušta*	*butšə*
1di	*intši*	*bušti*	*butši*
1de	*antšɨ*	*bušti*	*butšɨ*
1pi	*iŋki*	*bɔʔkti*	*bɔʔki*
1pe	*aŋkɨ*	*bɔʔkta*	*bɔʔka*
2s	*an*	*abušta*	*abutša*
2d	*antši*	*abušti*	*abutši*
2p	*ani*	*abuštini*	*abutšini*
3s	*ɨm*	*bušta*	*butša*
3d	*ɨmnɨ*	*bušti*	*butši*
3p	*hammɨl*	*hambušta*	*hambutša*

The fourth and fifth intransitive conjugation each distinguish a first, second and third stem. The fourth intransitive conjugation, vi-4, combines the patterns of

stem alternation found in the second and third intransitive conjugations. There are at least three fourth conjugation intransitive verbs, two of which have incomplete paradigms. All three verbs lack a stem final consonant. The Σ_1, which has the stem vowel */ɔ·/*, occurs in the singular and in the second and third plural. Dual forms take the Σ_2, which has the stem vowel */u/*, and first plural forms take the Σ_3, which has the stem vowel */ɨ/*. The complete (non-negated) simplex conjugation of the vi-4 verb *lɨnɨ* is as follows:

lɨnɨ vi-4 *lɔ·-lɨ-lu*, 1) (inceptive aspectivizer with infinitive) to commence, to begin, to start; *šɛtnɨ luyi* They[d] began to kill; *ŋyɛtnɨ lɔ·* It began to ache; 2) be felt unto someone; Nep. *lāgnu*; (a) *soʔwa lɨnɨ* be hungry unto someone, (b) *kɨmin lɨnɨ* be thirsty unto someone, (c) *soʔyəmbu* ("famine") *lɨnɨ* be in effect, be going on (of a famine); 3) perform, do (in lexicalized combinations): (a) *be·le· lɨnɨ* goof around, loaf off; Nep. *barālnu*; (b) *le· lɨnɨ* sing; Nep. *gāunu*; (c) *mintələlə lɨnɨ* be deeply engrossed in thought, be pensive; Nep. *socāī garnu*, *vicār garnu*; 4) as *lɔ·* in the construction: verb_stem + *-lɔ·*, be engaged in, whilst engrossed in some activity; *sə·ř šɛt-lɔ·* whilst removing lice, while engaged in removing lice (Nep. *jumrā mārī basikai*).

1s	*aŋ*	*lɔ·tə*	*lɔ·ŋə*
1di	*intši*	*luti*	*luyi*
1de	*antšɨ*	*lutɨ*	*luyɨ*
1pi	*iŋki*	*lɨkti*	*lɨki*
1pe	*aŋkɨ*	*lɨkta*	*lɨka*
2s	*an*	*alɔ·ta*	*alɔ·*
2d	*antši*	*aluti*	*aluyi*
2p	*ani*	*alɔ·tini*	*alɔ·ni*
3s	*ɨm*	*lɔ·ta*	*lɔ·*
3d	*ɨmnɨ*	*luti*	*luyi*
3p	*hammɨl*	*hamlɔ·ta*	*hamlɔ·*

The fifth intransitive conjugation, vi-5, resembles the third intransitive conjugation but distinguishes one stem, the Σ_2, for first plural nonpreterit and another stem, the Σ_3, for first plural preterit forms. There are two fifth conjugation verbs: *lənnɨ* vi-5 *ləntš/ləš-lɔ·-ləʔ* "come out, emerge" and *tšɔnnɨ* vi-5 *tšəntš/tšəš-tšɔ·-tšən* "hop forward". The complete (non-negated) simplex conjugation of the former is as follows:

1s	*aŋ*	*ləštə*	*ləntšə*
1di	*intši*	*ləšti*	*ləntši*
1de	*antšɨ*	*ləštɨ*	*ləntšɨ*
1pi	*iŋki*	*lɔ·kti*	*lə?ki*
1pe	*aŋkɨ*	*lɔ·kta*	*lə?ka*
2s	*an*	*aləšta*	*aləntša*
2d	*antši*	*aləšti*	*aləntši*
2p	*ani*	*aləštini*	*aləntšini*
3s	*ɨm*	*ləšta*	*ləntša*
3d	*ɨmnɨ*	*ləšti*	*ləntši*
3p	*hammɨl*	*hamləšta*	*hamləntša*

§1.2. Transitive conjugations

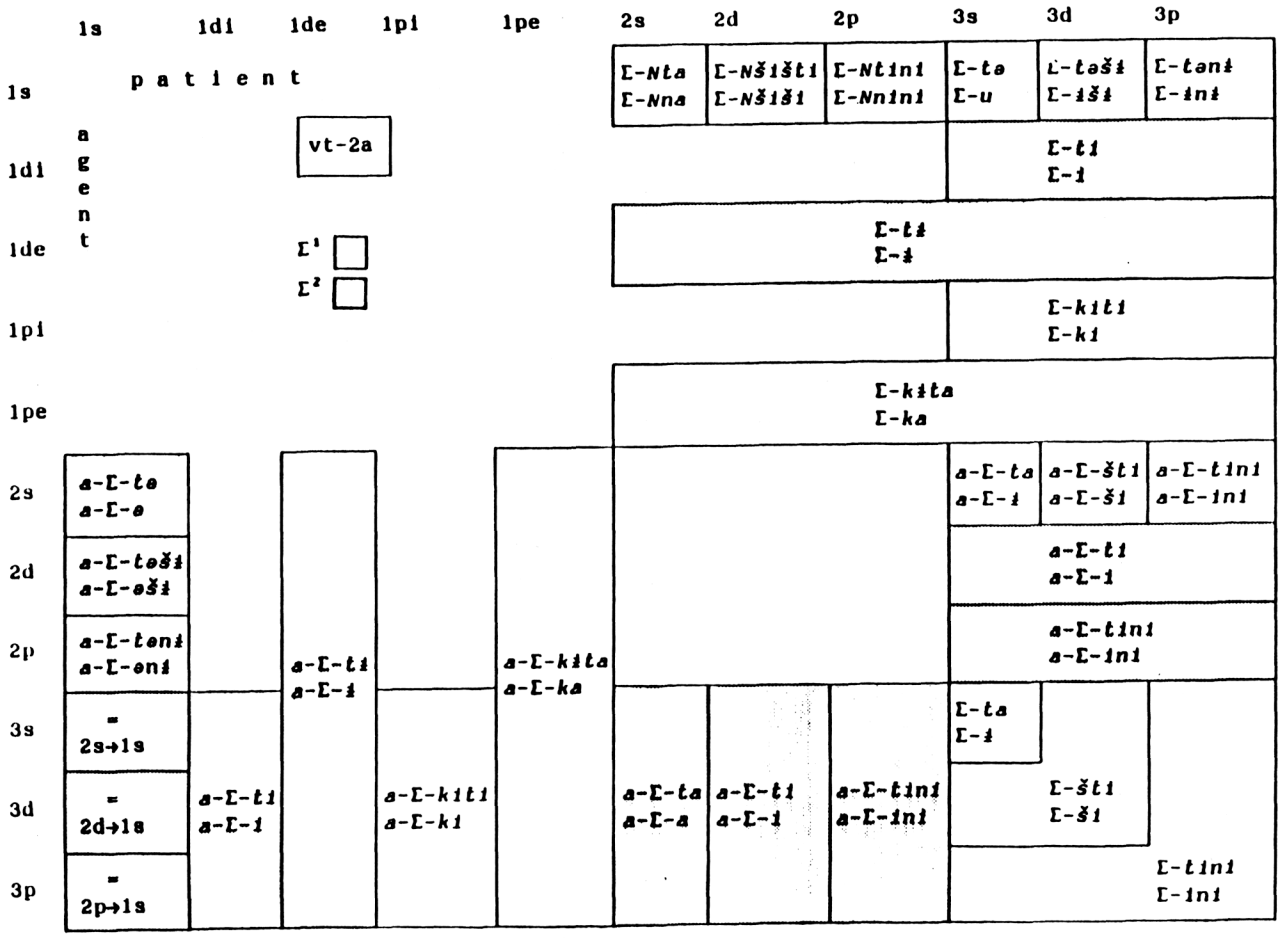
Verbs of the first transitive conjugation are characterized by a constant stem throughout the simplex paradigm. The majority of transitive verbs, however, exhibit some pattern of stem alternation and belong to one of the remaining conjugations. The patterns of stem alternation characteristic of the various transitive conjugations are illustrated diagrammatically on the following ten pages.

My corpus contains at least 36 first conjugation transitive verbs. Transitive first conjugation verbs either have an open stem or have one of the following stem finals:

kh/k	*m*	*l*
ph/p	*ŋ*	*r*
k		

The complete (non-negated) simplex conjugation of the verb *phɨknɨ* vt-1 *phɨk* "get up, arouse, wake up" is as follows:

1s→2s	*phɨkŋta*	*phɨkŋna*
1s→2d	*phɨkŋšišti*	*phɨkŋšiši*
1s→2p	*phɨkŋtini*	*phɨkŋnini*
1s→3s	*phɨktə*	*phuktu*
1s→3d	*phɨktəšɨ*	*phɨktɨšɨ*
1s→3p	*phɨktənɨ*	*phɨktɨnɨ*
1di→2/3	*phɨkti*	*phɨki*
1de→2/3	*phɨktɨ*	*phɨkɨ*
1pi→2/3	*phɨkkiti*	*phɨkki*
1pe→2/3	*phɨkkɨta*	*phɨkka*
2s→3s	*aphɨkta*	*aphɨktɨ*
2s→3d	*aphɨkšti*	*aphɨkši*
2s→3p	*aphɨktini*	*aphɨktini*
2d→3	*aphɨkti*	*aphɨki*


1s
1di
1de
1pi
1pe
2s
2d
2p
3s
3d
3p
patient
agent
vt-2a
Σ¹
Σ²
Σ-Nta
Σ-Nna
Σ-Nšišti
Σ-Nšiši
Σ-Ntini
Σ-Nnini
Σ-te
Σ-u
Σ-teši
Σ-iši
Σ-teni
Σ-ini
Σ-ti
Σ-i
Σ-ki
Σ-kita
Σ-ka
a-Σ-te
a-Σ-e
a-Σ-teši
a-Σ-eši
a-Σ-teni
a-Σ-eni
a-Σ-ta
a-Σ-i
a-Σ-ši
a-Σ-tini
a-Σ-ini
=
2s→1s
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2d→1s
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2p→1s
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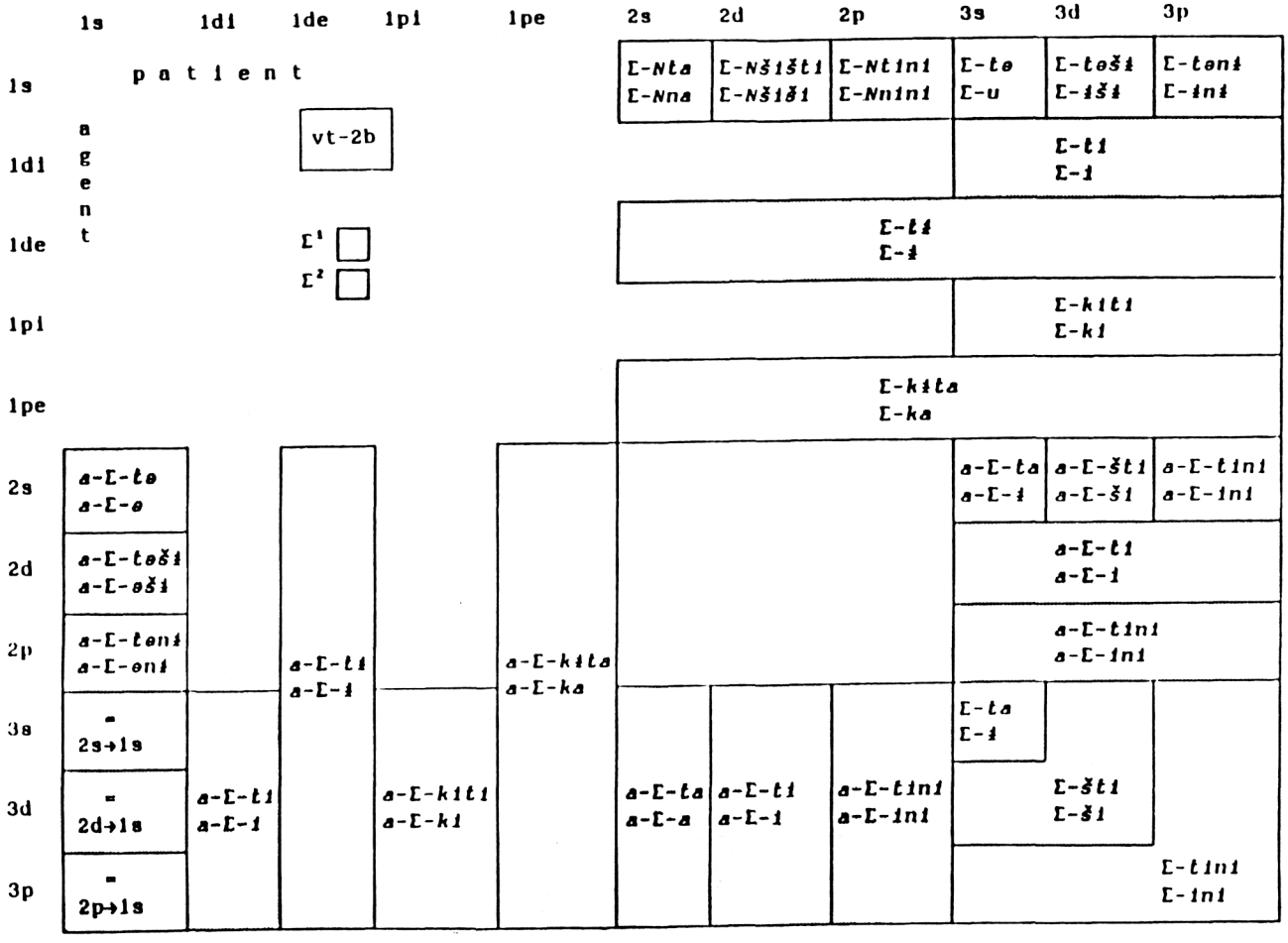
a-Σ-ki
Σ-ta
Σ-i
Σ-šti
Σ-ši
Σ-tini
Σ-ini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1di
1de
1pi
1pe
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2d
2p
3s
3d
3p
patient
agent
vt-2b
Σ¹
Σ²
Σ-Nta
Σ-Nna
Σ-NšišTi
Σ-Nšiši
Σ-Ntini
Σ-Nnini
Σ-tə
Σ-u
Σ-təši
Σ-išši
Σ-təni
Σ-ini
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Σ-i
Σ-ti
Σ-i
Σ-kiti
Σ-ki
Σ-kita
Σ-ka
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a-Σ-ə
a-Σ-təši
a-Σ-əši
a-Σ-təni
a-Σ-əni
a-Σ-ti
a-Σ-i
a-Σ-kita
a-Σ-ka
a-Σ-ta
a-Σ-i
a-Σ-šti
a-Σ-ši
a-Σ-tini
a-Σ-ini
a-Σ-ti
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a-Σ-tini
a-Σ-ini
=
2s→1s
=
2d→1s
=
2p→1s
a-Σ-ti
a-Σ-i
a-Σ-kiti
a-Σ-ki
a-Σ-ta
a-Σ-a
a-Σ-ti
a-Σ-i
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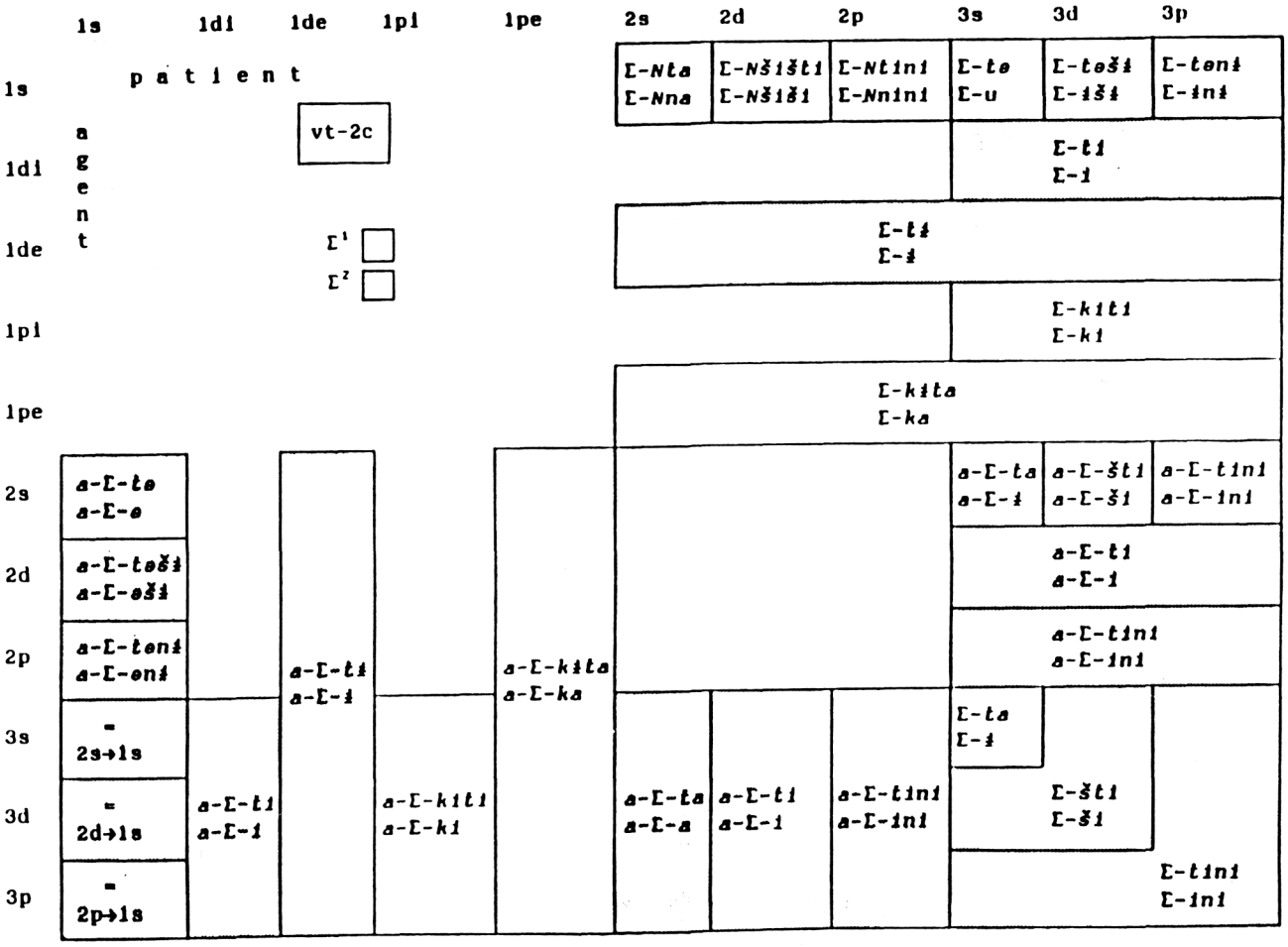
Σ-ta
Σ-i
Σ-šti
Σ-ši
Σ-tini
Σ-ini


1s
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1pi
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2d
2p
3s
3d
3p
patient
agent
vt-2c
Σ¹
Σ²
Σ-Nta
Σ-Nna
Σ-Nšišti
Σ-Nšiši
Σ-Ntini
Σ-Nnini
Σ-te
Σ-u
Σ-teši
Σ-iši
Σ-teni
Σ-ini
Σ-ti
Σ-i
Σ-ki
Σ-kiti
Σ-kita
Σ-ka
a-Σ-te
a-Σ-e
a-Σ-teši
a-Σ-eši
a-Σ-teni
a-Σ-eni
a-Σ-ta
a-Σ-i
a-Σ-ši
a-Σ-tini
a-Σ-ini
a-Σ-kita
a-Σ-ka
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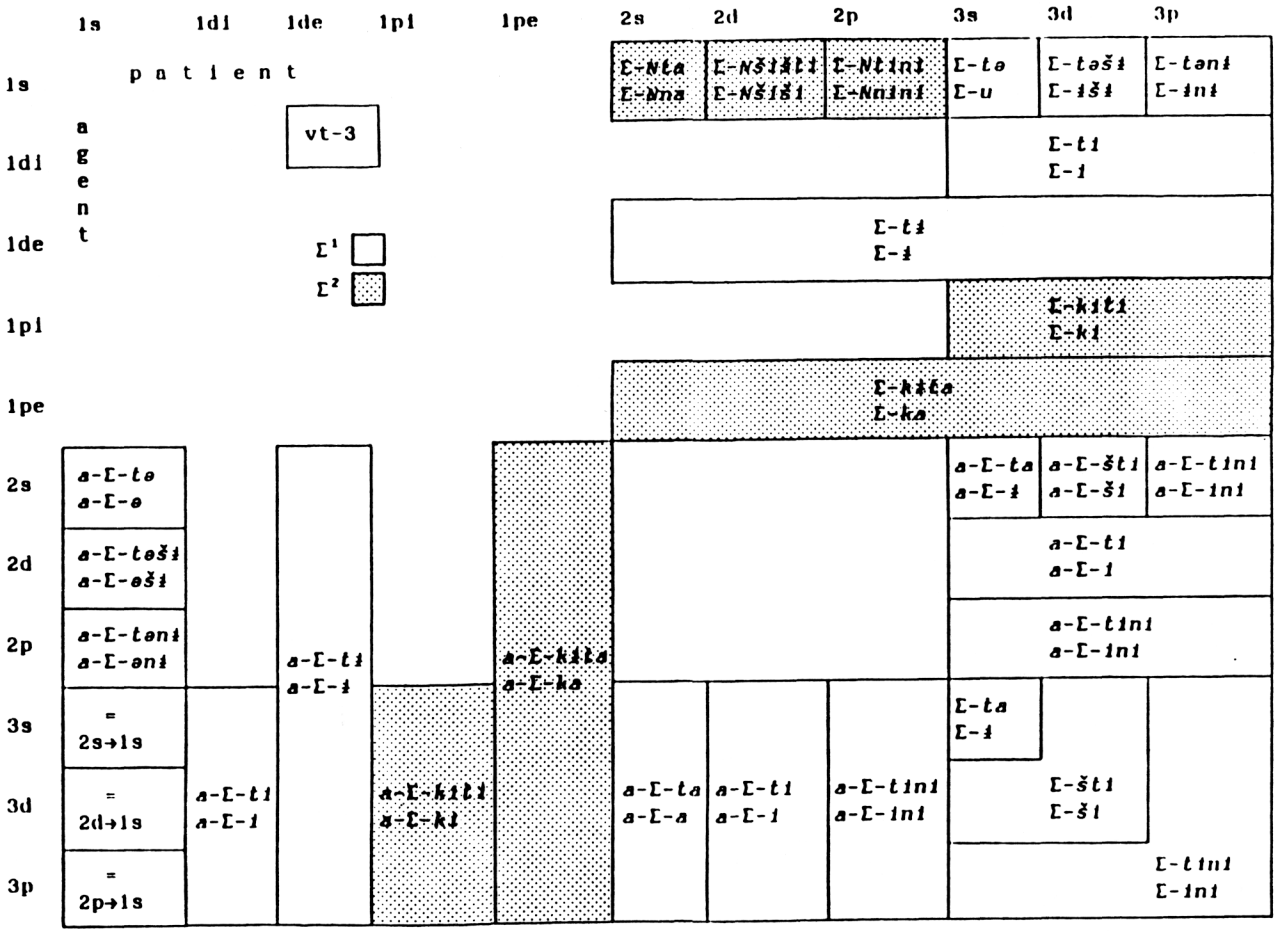
= 2d→1s
= 2p→1s
a-Σ-kiti
a-Σ-ki
Σ-ta
Σ-ši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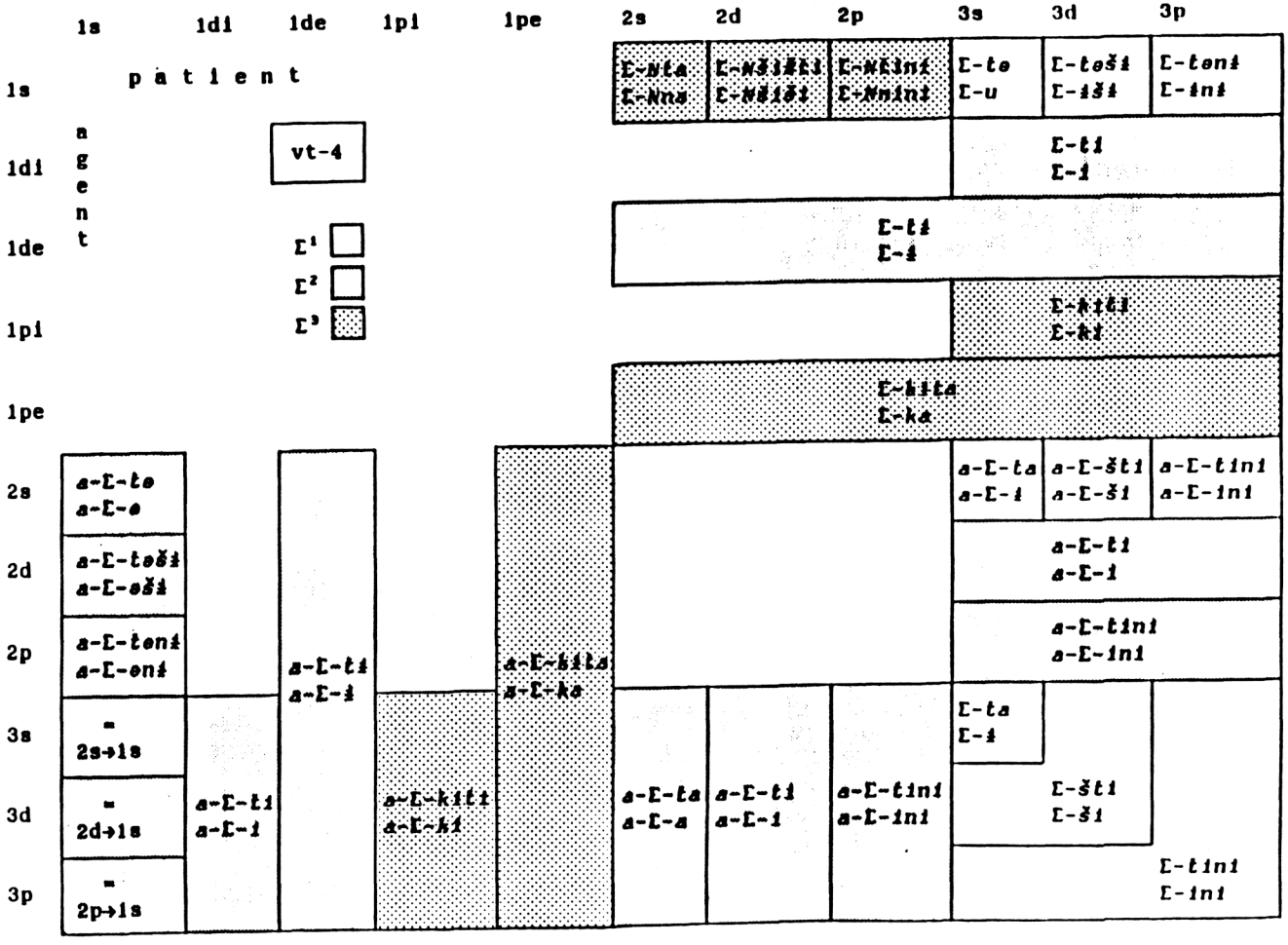
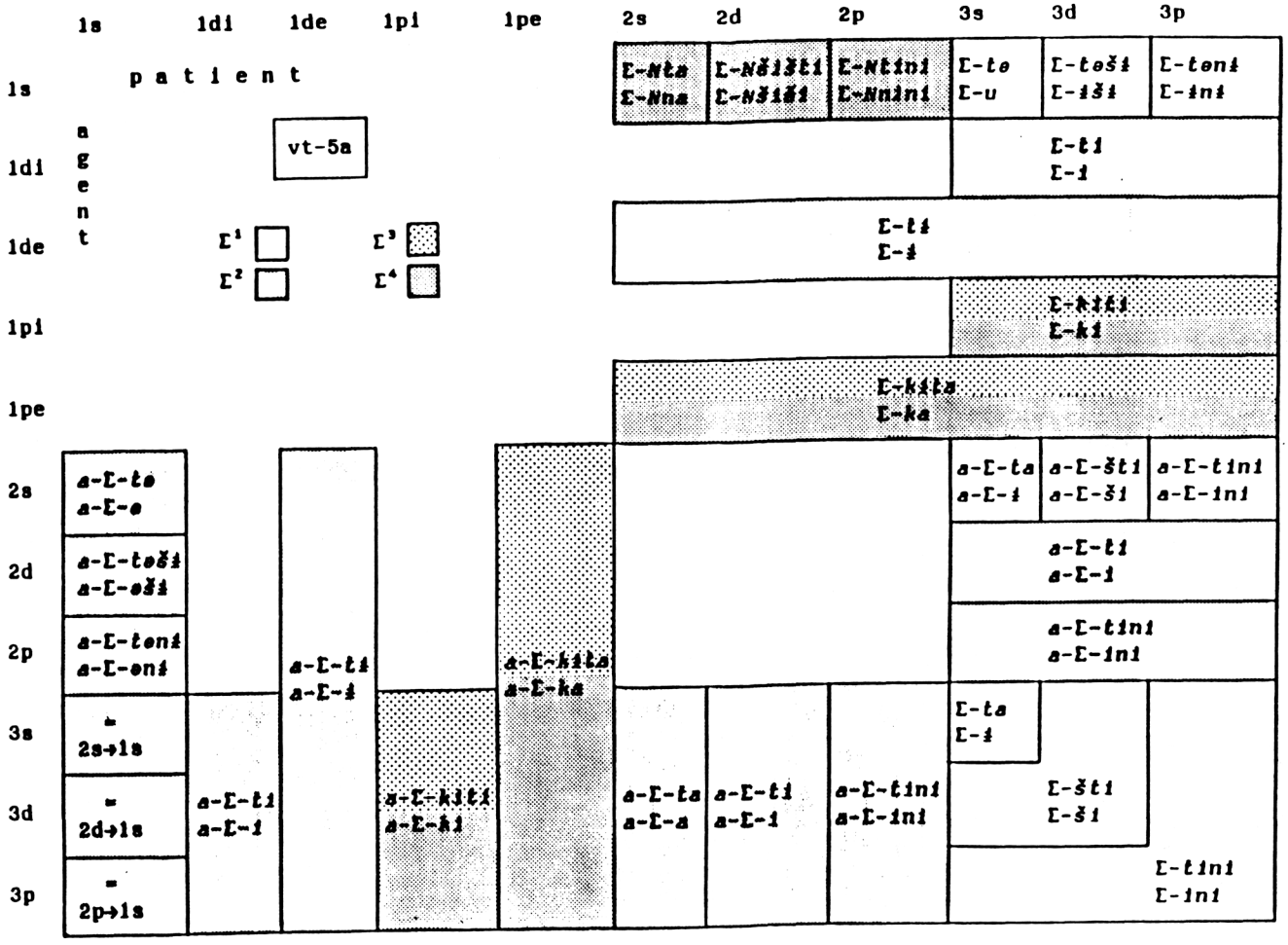
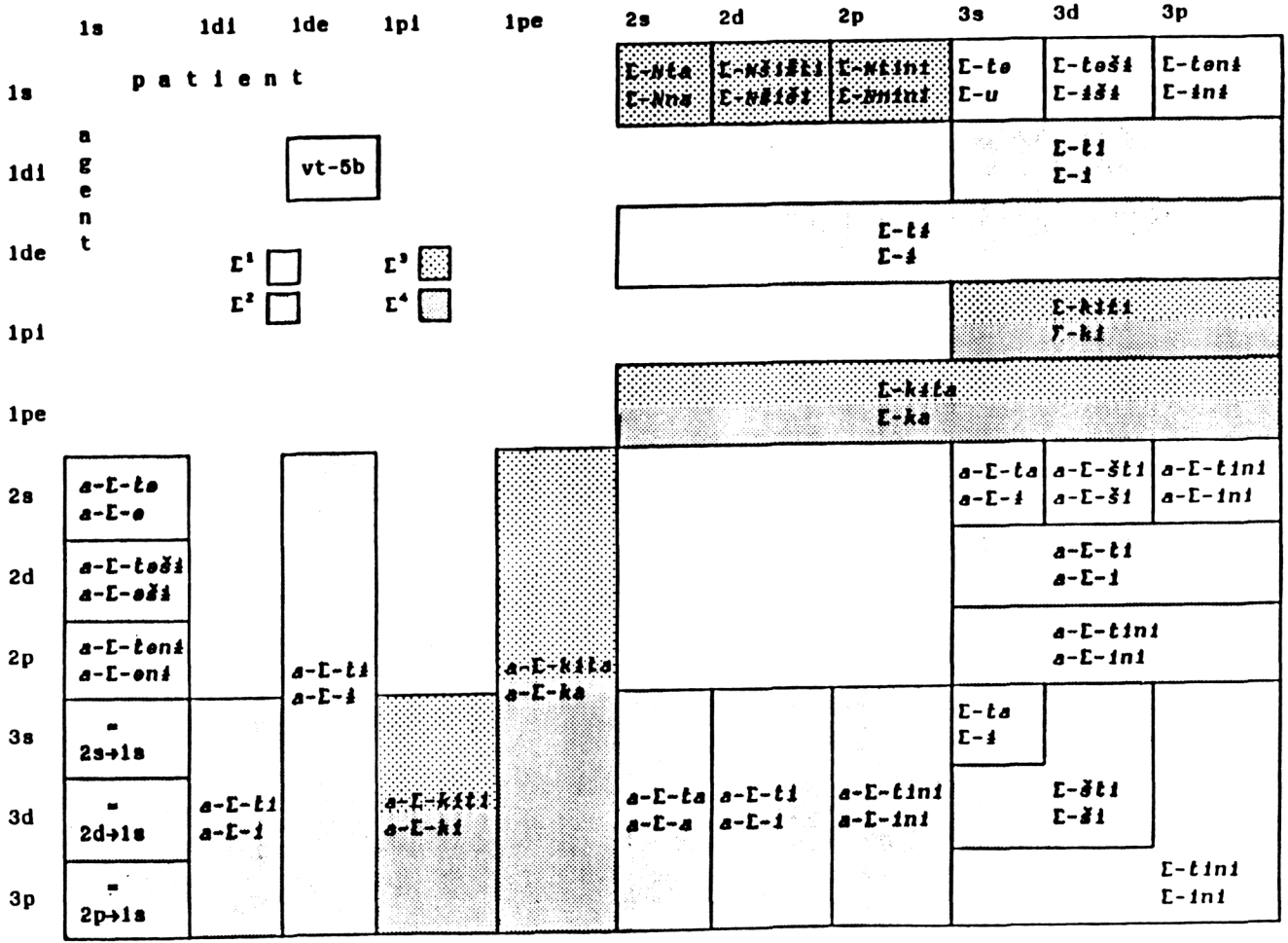
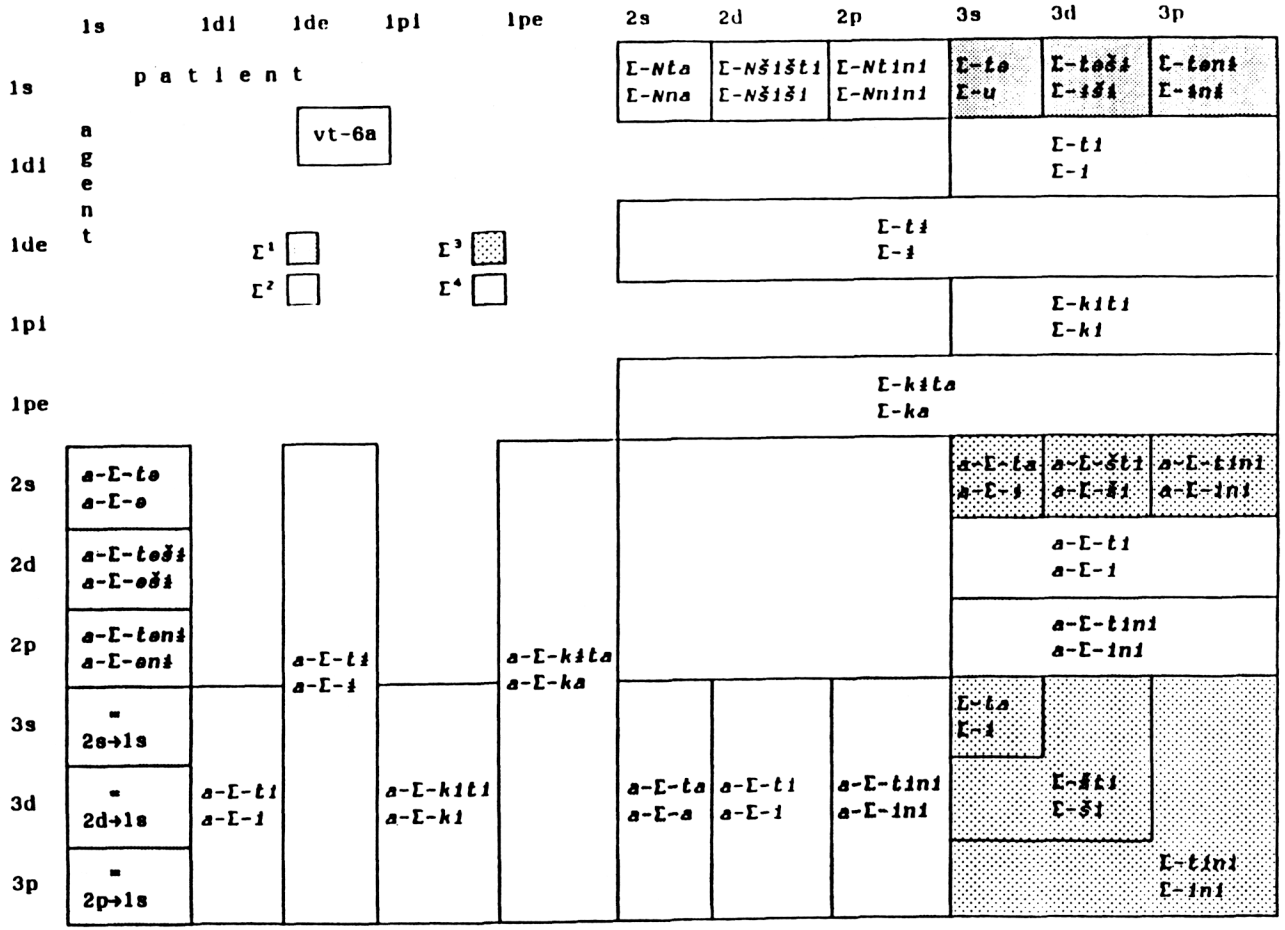
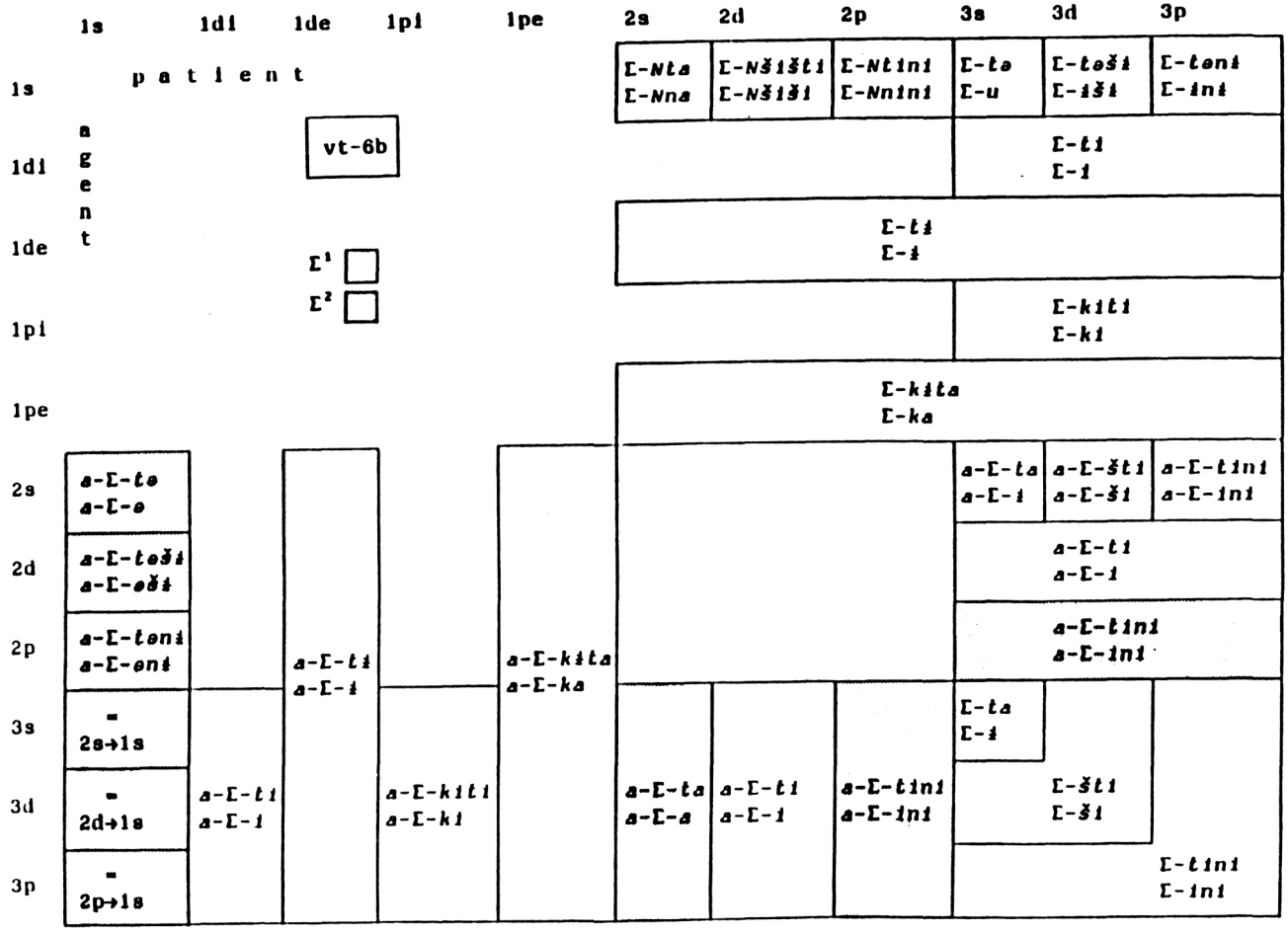
1pi
1pe
2s
2d
2p
3s
3d
3p
patient
agent
vt-3
Σ-Nta
Σ-Nna
Σ-Nšiški
Σ-Nšiši
Σ-Ntini
Σ-Nnini
Σ-te
Σ-u
Σ-təši
Σ-išši
Σ-təni
Σ-ini
Σ-ti
Σ-i
Σ-ti
Σ-i
Σ-kiti
Σ-ki
Σ-kita
Σ-ka
a-Σ-te
a-Σ-e
a-Σ-təši
a-Σ-əši
a-Σ-təni
a-Σ-əni
=
2s→1s
=
2d→1s
=
2p→1s
a-Σ-ti
a-Σ-i
a-Σ-ti
a-Σ-i
a-Σ-kiti
a-Σ-ki
a-Σ-kita
a-Σ-ka
a-Σ-ta
a-Σ-a
a-Σ-ti
a-Σ-i
a-Σ-tini
a-Σ-ini
a-Σ-ta
a-Σ-i
a-Σ-šti
a-Σ-ši
a-Σ-tini
a-Σ-ini
a-Σ-ti
a-Σ-i
a-Σ-tini
a-Σ-ini
Σ-ta
Σ-i
Σ-šti
Σ-ši
Σ-tini
Σ-ini


1s
1di
1de
1pi
1pe
2s
2d
2p
3s
3d
3p
patient
agent
vt-4
Σ¹
Σ²
Σ³
Σ-Nta
Σ-Nna
Σ-Nšiɬi
Σ-Nšiši
Σ-Ntini
Σ-Nnini
Σ-te
Σ-u
Σ-teši
Σ-iši
Σ-teni
Σ-ini
Σ-ti
Σ-i
Σ-kiti
Σ-ki
Σ-kita
Σ-ka
a-Σ-te
a-Σ-e
a-Σ-teši
a-Σ-eši
a-Σ-teni
a-Σ-eni
=
2s→1s
=
2d→1s
=
2p→1s
a-Σ-ti
a-Σ-i
a-Σ-kiti
a-Σ-ki
a-Σ-kita
a-Σ-ka
a-Σ-ta
a-Σ-i
a-Σ-ti
a-Σ-i
a-Σ-tini
a-Σ-ini
a-Σ-šti
a-Σ-ši


1s
1di
1de
1pi
1pe
2s
2d
2p
3s
3d
3p
patient
agent
vt-5a
Σ-Nta
Σ-Nna
Σ-Nšišti
Σ-Nšišši
Σ-Ntini
Σ-Nnini
Σ-to
Σ-u
Σ-toši
Σ-išši
Σ-toni
Σ-ini
Σ-ti
Σ-i
Σ-kiti
Σ-ki
Σ-kita
Σ-ka
a-Σ-to
a-Σ-o
a-Σ-toši
a-Σ-ošši
a-Σ-toni
a-Σ-oni
=
2s→1s
=
2d→1s
=
2p→1s
a-Σ-ti
a-Σ-i
a-Σ-kiti
a-Σ-ki
a-Σ-kita
a-Σ-ka
a-Σ-ta
a-Σ-i
a-Σ-šti
a-Σ-ši
a-Σ-tini
a-Σ-ini
Σ-ta
Σ-i
Σ-šti
Σ-ši
Σ-tini
Σ-ini


1s
1di
1de
1pi
1pe
2s
2d
2p
3s
3d
3p
patient
agent
vt-5b
Σ¹
Σ²
Σ³
Σ⁴
Σ-Nta
Σ-Nna
Σ-Nčiški
Σ-Nčiši
Σ-Nčini
Σ-Nmini
Σ-te
Σ-u
Σ-teši
Σ-iši
Σ-teni
Σ-ini
Σ-ti
Σ-i
Σ-ki
Σ-kita
Σ-ka
Γ-ki
a-Σ-te
a-Σ-e
a-Σ-teši
a-Σ-eši
a-Σ-teni
a-Σ-eni
a-Σ-ti
a-Σ-i
a-Σ-kiti
a-Σ-ki
a-Σ-kita
a-Σ-ka
a-Σ-ta
a-Σ-i
a-Σ-ši
a-Σ-tini
a-Σ-ini
=
2s→1s
=
2d→1s
=
2p→1s
Σ-ta
Σ-i
Σ-ši
Σ-ši
Σ-tini
Σ-ini


1s
1di
1de
1pi
1pe
2s
2d
2p
3s
3d
3p
patient
agent
vt-6a
Σ¹
Σ²
Σ³
Σ⁴
Σ-Nta
Σ-Nna
Σ-Nšišti
Σ-Nšiši
Σ-Ntini
Σ-Nnini
Σ-te
Σ-u
Σ-teši
Σ-iši
Σ-teni
Σ-ini
Σ-ti
Σ-i
Σ-kiti
Σ-ki
Σ-kita
Σ-ka
a-Σ-te
a-Σ-e
a-Σ-teši
a-Σ-eši
a-Σ-teni
a-Σ-eni
=
2s→1s
=
2d→1s
=
2p→1s
a-Σ-ti
a-Σ-i
a-Σ-kiti
a-Σ-ki
a-Σ-kita
a-Σ-ka
a-Σ-ta
a-Σ-a
a-Σ-ti
a-Σ-i
a-Σ-tini
a-Σ-ini
a-Σ-ta
a-Σ-i
a-Σ-ši
a-Σ-ši
a-Σ-tini
a-Σ-ini
Σ-ta
Σ-i
Σ-šti
Σ-ši
Σ-tini
Σ-ini


1s
1di
1de
1pi
1pe
2s
2d
2p
3s
3d
3p
patient
agent
vt-6b
Σ¹
Σ²
Σ-Nta
Σ-Nna
Σ-Nšišti
Σ-Nšiši
Σ-Ntini
Σ-Nnini
Σ-ta
Σ-u
Σ-teši
Σ-iši
Σ-teni
Σ-ini
Σ-ti
Σ-i
Σ-kiti
Σ-ki
Σ-kita
Σ-ka
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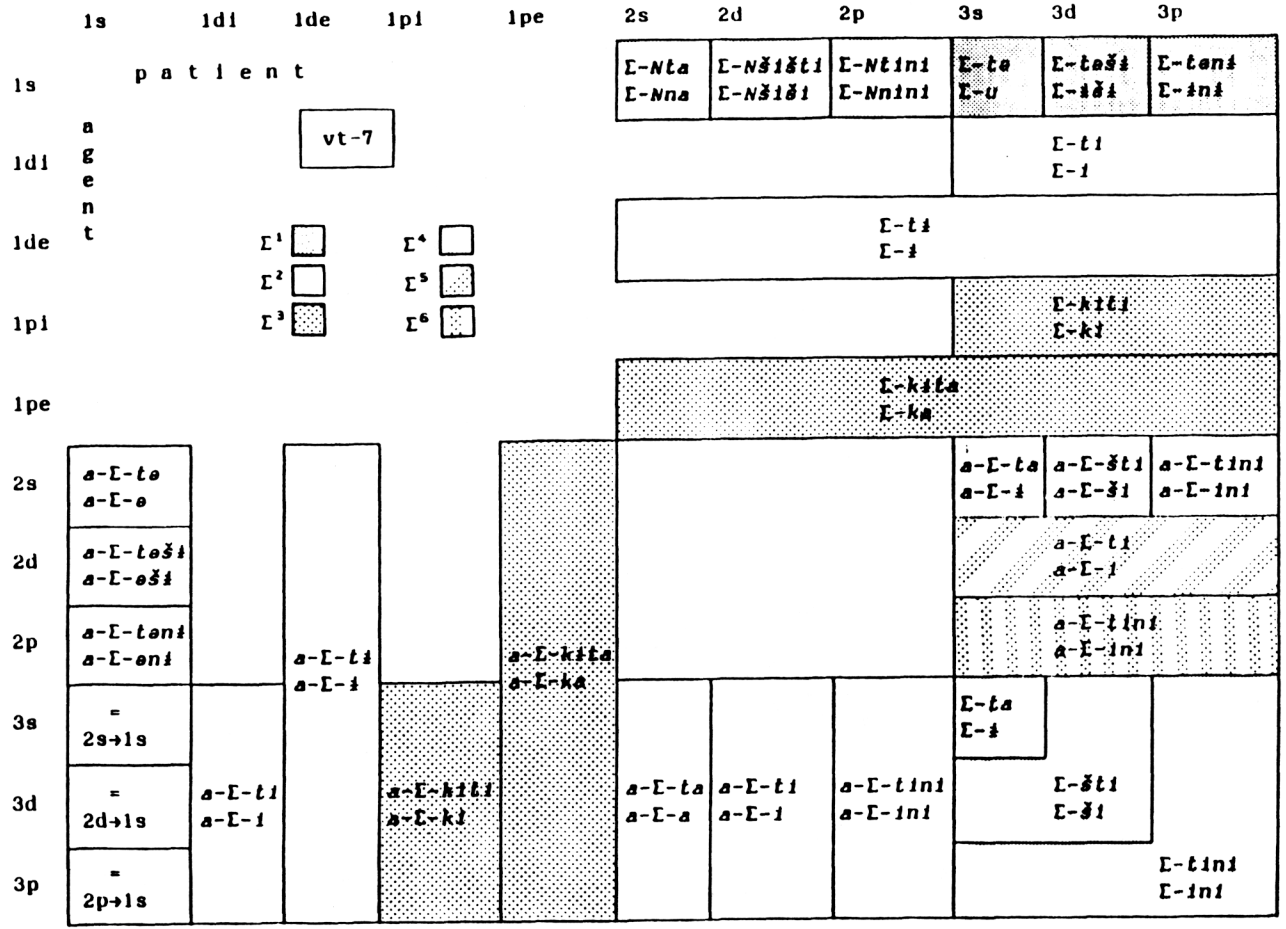
a-Σ-teši
a-Σ-eši
a-Σ-teni
a-Σ-eni
a-Σ-ta
a-Σ-i
a-Σ-šti
a-Σ-ši
a-Σ-tini
a-Σ-ini
a-Σ-ti
a-Σ-i
a-Σ-kita
a-Σ-ka
=
2s→1s
=
2d→1s
=
2p→1s
a-Σ-ti
a-Σ-i
a-Σ-kiti
a-Σ-ki
a-Σ-ta
a-Σ-a
a-Σ-tini
a-Σ-ini
Σ-ta
Σ-i
Σ-šti
Σ-ši


1s 1di 1de 1pi 1pe 2s 2d 2p 3s 3d 3p
patient
agent
1s
1di
1de
1pi
1pe
2s
2d
2p
3s
3d
3p
vt-7
Σ-Nta
Σ-Nna
Σ-Nšišti
Σ-Nšiši
Σ-Ntini
Σ-Nnini
Σ-ta
Σ-u
Σ-teši
Σ-iši
Σ-teni
Σ-ini
Σ-ti
Σ-i
Σ-kiti
Σ-ki
Σ-kita
Σ-ka
a-Σ-te
a-Σ-e
a-Σ-teši
a-Σ-eši
a-Σ-teni
a-Σ-eni
= 2s→1s
= 2d→1s
= 2p→1s
a-Σ-ti
a-Σ-i
a-Σ-kiti
a-Σ-ki
a-Σ-kita
a-Σ-ka
a-Σ-ta
a-Σ-a
a-Σ-ti
a-Σ-i
a-Σ-tini
a-Σ-ini
a-Σ-ta
a-Σ-i
a-Σ-šti
a-Σ-ši
a-Σ-tini
a-Σ-ini
Σ-ta
Σ-i
Σ-šti
Σ-ši
Σ-tini
Σ-ini

2p→3	*aphɨktini*	*aphɨkini*
3s→3s	*phɨkta*	*phɨkɨ*
3s→3d, 3d→3s, 3d→3d	*phɨkšti*	*phɨkši*
3s→3p, 3d→3p, 3p→3s, 3p→3d, 3p→3p	*phɨktini*	*phɨktini*
2s/3s→1s	*aphɨktə*	*aphɨkə*
2d/3d→1s	*aphɨktəšɨ*	*aphɨkəšɨ*
2p/3p→1s	*aphɨktənɨ*	*aphɨkənɨ*
3→1di	*aphɨkti*	*aphɨki*
2/3→1de	*aphɨktɨ*	*aphɨkɨ*
3→1pi	*aphɨkkiti*	*aphɨkki*
2/3→1pe	*aphɨkkɨta*	*aphɨkka*
3→2s	*aphɨkta*	*aphɨka*
3→2d	*aphɨkti*	*aphɨki*
3→2p	*aphɨktini*	*aphɨkini*

The second transitive conjugation consists of a second conjugation proper, vt-2a, for which I have counted 96 verbs to date, and two minor conjugations, vt-2b and vt-2c, each containing at least three verbs. Transitive second conjugation verbs distinguish two stems. In the second conjugation proper, vt-2a, the Σ_1 occurs in forms with a first singular agent or first plural actant and in 2s→3 and 3→3 forms. The Σ_2 occurs in forms with a first singular patient or first dual actant and in 2d→3, 2p→3 and 3→2 forms. Conjugation vt-2b differs from the second conjugation proper in that $(3\rightarrow3)^d$ forms are taken from the Σ_2. Conjugation vt-2c differs from the second conjugation proper in that both $(3\rightarrow3)^d$ and $(3\rightarrow3)^p$ forms are taken from the Σ_2.

Verbs of the second conjugations exhibit the following possible stem finals:

d/t-tš/š	*nd/n-ntš/š*
t-tš/š	*tnd/tn-tntš/š*
kt/k-kh/k	*md/m-m*
pt/p-ph/p	
řd/ř-ř	*ŋ-ŋš*

The minor second conjugation, vt-2b, contains three verbs with the stem final *nd/n-ntš/š*, and the minor conjugation, vt-2c, contains three verbs with the stem final *pt/p-ph/p*.

Stem alternation in all second conjugation verbs involves alternation of the stem final consonant, but stem alternation in a subset of vt-2a verbs also involves the stem vowel. Such vt-2a verbs either have the stem vowel /*i*/ in Σ_2 and the lower vowels /*e·*/ or /*ɛ*/ in Σ_1 or the stem vowel /*u*/ in Σ_2 and the lower vowel /*ɔ*/ or /*ə*/ in Σ_1.

The complete (non-negated) simplex conjugations of the second conjugation verbs *do·khɔtnɨ* vt-2a "see", *innɨ* vt-2b "sell" and *i·pnɨ* vt-2c "put to bed" are as follows:

do·khɔtnɨ vt-2a *do·khɔt-du·khutš/du·khuš*, see; Nep. *dekhnu*.

1s→2s	*do·khɔtnta*	*do·khɔtnna*
1s→2d	*do·khɔtnšišti*	*do·khɔtnšiši*
1s→2p	*do·khɔtntini*	*do·khɔtnnini*
1s→3s	*do·khɔttə*	*do·khɔtu*
1s→3d	*do·khɔttəšɨ*	*do·khɔtɨšɨ*
1s→3p	*do·khɔttənɨ*	*do·khɔtɨnɨ*
1di→2/3	*du·khušti*	*du·khutši*
1de→2/3	*du·khuštɨ*	*du·khutšɨ*
1pi→2/3	*do·khɔ?kti*	*do·khɔ?ki*
1pe→2/3	*do·khɔ?ktə*	*do·khɔ?kə*
2s→3s	*ado·khɔtta*	*ado·khɔtɨ*
2s→3d	*ado·khɔšti*	*ado·khɔšši*
2s→3p	*ado·khɔttini*	*ado·khɔtini*
2d→3	*adu·khušti*	*adu·khutši*
2p→3	*adu·khuštini*	*adu·khutšini*
3s→3s	*do·khɔtta*	*do·khɔtɨ*
3s→3d 3d→3s 3d→3d	*do·khɔšti*	*do·khɔšši*
3s→3p 3d→3p 3p→3s 3p→3d 3p→3p	*do·khɔttini*	*do·khɔtini*
2s/3s→1s	*adu·khuštə*	*adu·khutšə*
2d/3d→1s	*adu·khuštəšɨ*	*adu·khutšəšɨ*
2p/3p→1s	*adu·khuštənɨ*	*adu·khutšənɨ*
3→1di	*adu·khušti*	*adu·khutši*
2/3→1de	*adu·khuštɨ*	*adu·khutšɨ*
3→1pi	*ado·khɔ?kti*	*ado·khɔ?ki*

2/3→1pe	*ado·khɔ?kta*	*ado·khɔ?ka*
3→2s	*adu·khušta*	*adu·khutša*
3→2d	*adu·khušti*	*adu·khutši*
3→2p	*adu·khuštini*	*adu·khutšini*

inni vt-2b *ind/in-intš/iš*, sell something (patient) to someone (*-bi* LOC); *Tɔm bhi?i, abhi?i, a?inta? Antši-bi a?inta?* Will you[s] sell it to us[de]? Will you[s] sell that cow, that cow of yours?; Nep. *becnu*.

aŋa	*intə*	*indu*
intši?a	*išti*	*intši*
antši?a	*išti*	*intši*
iŋki?a	*inkiti*	*inki*
aŋki?a	*inkita*	*inka*
ana	*a?inta*	*a?indi*
antši?a	*a?išti*	*a?intši*
ani?a	*a?ištini*	*a?intšini*
ima	*inta*	*indi*
imni?a	*išti*	*intši*
hammil?a	*intini*	*indini*

i·pni vt-2c *i·pt/i·p-i·ph/i·p*, put to bed, put to sleep; Nep. *sutāunu*.

aŋa	*i·ptə*	*i·ptu*
intši?a	*i·pti*	*i·phi*
antši?a	*i·pti*	*i·phi*
iŋki?a	*i·pkiti*	*i·pki*
aŋki?a	*i·pkita*	*i·pka*
ana	*a?i·pta*	*a?i·pti*
antši?a	*a?i·pti*	*a?i·phi*
ani?a	*a?i·ptini*	*a?i·phini*
ima	*i·pta*	*i·pti*
imni?a	*i·pšti*	*i·pši*
hammil?a	*i·ptini*	*i·phini*

To date I have counted 19 verbs in the third transitive conjugation, vt-3. Transitive third conjugation verbs distinguish two stems. The Σ_2 occurs in 1s→2 forms and in forms with a first plural actant. The remaining forms are are all taken from the Σ_1. Verbs of the third conjugation have the following stem finals:

kh/k-k	*ŋ*	*l*
ph/p-p	*m*	*r*
tš/š-t		

Stem alternation in third conjugation verbs invariably involves alternation of stem vowel. The Σ_1 stem vowel can either be */u/* which is lowered to */ɔ/*, */ə/* or */a/* in Σ_2, or */i/* which is lowered to */ɛ/* or the sequence */yə/*, i.e. [*jə*], in Σ_2. The complete (non-negated) simplex conjugation of the verb *lɔpnɨ* vt-3 "catch" is as follows:

lɔpnɨ vt-3 *luph/lup-lɔp*, catch, seize, grab; pounce upon (said of wild animals and their prey); Nep. ***samāunu***, ***samātnu***, ***pakaḍnu***; cf. *řɔŋnɨ*.

1s→2s	*lɔpmta*	*lɔpmna*
1s→2d	*lɔpmšti*	*lɔpmšiši*
1s→2p	*lɔpmtini*	*lɔpmnini*
1s→3s	*luptə*	*luphu*
1s→3d	*luptəšɨ*	*luphɨšɨ*
1s→3p	*luptənɨ*	*luphɨnɨ*
1di→2/3	*lupti*	*luphi*
1de→2/3	*luptɨ*	*luphɨ*
1pi→2/3	*lɔpkiti*	*lɔpki*
1pe→2/3	*lɔpkɨta*	*lɔpka*
2s→3s	*alupta*	*aluphɨ*
2s→3d	*alupšti*	*alupši*
2s→3p	*aluptini*	*aluphini*
2d→3	*alupti*	*aluphi*
2p→3	*aluptini*	*aluphini*
3s→3s	*lupta*	*luphɨ*
3s→3d 3d→3s 3d→3d	*lupšti*	*lupši*
3s→3p 3d→3p 3p→3s 3p→3d 3p→3p	*luptini*	*luphini*
2s/3s→1s	*aluptə*	*aluphə*
2d/3d→1s	*aluptəšɨ*	*aluphəšɨ*
2p/3p→1s	*aluptənɨ*	*aluphənɨ*
3→1di	*alupti*	*aluphi*
2/3→1de	*aluptɨ*	*aluphɨ*
3→1pi	*alɔpkiti*	*alɔpki*
2/3→1pe	*alɔpkɨta*	*alɔpka*
3→2s	*alupta*	*alupha*

3→2d	*alupti*	*aluphi*
3→2p	*aluptini*	*aluphini*

The fourth transitive conjugation combines the patterns of stem alternation characteristic of the second (vt-2a) and third (vt-3) conjugations. Stem alternation in the fourth conjugation involves the stem final and, in some cases, also the stem vowel. The 1s→3, 2s→3 and 3→3 forms are taken from the Σ_1. The forms with a first singular patient or first dual actant and 2d→3, 2p→3 and 3→2 forms are taken from the Σ_2. The 1s→2 forms and forms with a first plural actant are taken from the Σ_3. I have counted 12 transitive fourth conjugation verbs to date. Verbs of the fourth conjugation have one of the following stem finals:

d/t-tš/š-t *t-tš/š-t* *nd/n-ntš/š-t*
d/t-tš/š-ø

When stem alternation in vt-4 verbs involves the stem vowel as well, the stem vowel is either */u/* in Σ_1 and Σ_2 which is lowered to */ɔ/* in Σ_3, or */i/* in Σ_1 and Σ_2 which in Σ_3 is lowered to */e/* or */ɛ/*. The complete (non-negated) simplex conjugation of the verb *li·tnɨ* vt-3 "catch" is as follows:

li·tnɨ vt-4 *li·d/li·t-li·tš/li·š-lɛt*, 1) release, let go, let loose; Nep. *choḍnu*; 2) *so·m li·tnɨ* (*so·m* "breath" as third singular patient) exhale; Nep. *sās phirnu*; cf. *pɔtnɨ* vt-2a (3), *thɨtnɨ* vt-2a (2).

1s→2s	*lɛtnta*	*lɛtnna*
1s→2d	*lɛtn(ši)šti*	*lɛtnšiši*
1s→2p	*lɛtntini*	*lɛtnnini*
1s→3s	*li·ttə*	*li·du*
1s→3d	*li·ttəšɨ*	*li·dišɨ*
1s→3p	*li·ttənɨ*	*li·dinɨ*
1di→2/3	*li·šti*	*li·tši*
1de→2/3	*li·štɨ*	*li·tšɨ*
1pi→2/3	*lɛ?kti*	*lɛ?ki*
1pe→2/3	*lɛ?kta*	*lɛ?ka*
2s→3s	*ali·tta*	*ali·dɨ*
2s→3d	*ali·šti*	*ali·šši*
2s→3p	*ali·ttini*	*ali·dini*
2d→3	*ali·šti*	*ali·tši*
2p→3	*ali·štini*	*ali·tšini*
3s→3s	*li·tta*	*li·dɨ*

3s→3d 3d→3s 3d→3d	*li·šti*	*li·šši*
3s→3p 3d→3p 3p→3s 3p→3d 3p→3p	*li·ttini*	*li·dini*
2s/3s→1s	*ali·šte*	*ali·tše*
2d/3d→1s	*ali·šteši*	*ali·tšeši*
2p/3p→1s	*ali·štəni*	*ali·tšəni*
3→1di	*ali·šti*	*ali·tši*
2/3→1de	*ali·šti*	*ali·tši*
3→1pi	*alɛ?kti*	*alɛ?ki*
2/3→1pe	*alɛ?kta*	*alɛ?ka*
3→2s	*ali·šta*	*ali·tša*
3→2d	*ali·šti*	*ali·tši*
3→2p	*ali·štini*	*ali·tšini*

The fifth transitive conjugation, vt-5a and vt-5b, bears some resemblance to the fourth and distinguishes four different stems. In the fifth conjugation, vt-5a, the Σ_1 occurs in 1s→3, 2s→3 and 3→3 forms. The Σ_2 occurs in forms with a first singular patient or first dual actant and in 2d→3, 2p→3 and 3→2 forms. Nonpreterit forms with a first plural actant are taken from the Σ_3. Preterit forms with a first plural actant and 1s→2 forms are taken from the Σ_4. The pattern of stem alternation of vt-5b verbs differs from the pattern just described in that $(3\rightarrow3)^d$ forms are taken from the Σ_2 and that the 1s→2 forms are taken from the Σ_3. To date I have counted 5 vt-5a and 3 vt-5b verbs in my corpus. The vt-5a verbs have the stem finals:

tnd/tn-tntš/š-ø-t
nd/n-ntš/š-t-n
nd/n-ntš/š-ø-n

The vt-5b verbs have the stem finals:

nd/n-ntš/š-n-t
nd/n-nts/š-ø-n

One vt-5b verb has the stem vowel /ɔ/ in Σ_4, whereas it has the stem vowel /ə/ in Σ_1, Σ_2 and Σ_3.

The complete (non-negated) simplex conjugations of the fifth conjugation verbs *phiŋkhɔtnnɨ* vt-5a "send off to someone" and *tšɛnnɨ* vt-5b "teach" are as follows:

phiŋkhɔtnnɨ vt-5a *phiŋkhɔtnd/phiŋkhɔtn-phiŋkhɔtntš/phiŋkhɔš-phiŋkhɔ-phiŋkhɔt*, (profferatively aspectivized *phiŋnɨ* "send") send off, send to (patient agreement with recipient, not object sent); Nep. *paṭhāī dinu*; cf. *khip-khɔtnnɨ*, *ři·pkhɔtnnɨ*, *se·wa khɔtnnɨ*.

1s→2s	*phiŋkhɔtnta*	*phiŋkhɔtnna*
1s→2d	*phiŋkhɔtnšišti*	*phiŋkhɔtnšiši*
1s→2p	*phiŋkhɔtntini*	*phiŋkhɔtnni*
1s→3s	*phiŋkhɔtntə*	*phiŋkhɔtndu*
1s→3d	*phiŋkhɔtntəšɨ*	*phiŋkhɔtndɨšɨ*
1s→3p	*phiŋkhɔtntənɨ*	*phiŋkhɔtndɨnɨ*
1di→2/3	*phiŋkhɔšti*	*phiŋkhɔtntši*
1de→2/3	*phiŋkhɔštɨ*	*phiŋkhɔtntšɨ*
1pi→2/3	*phiŋkhɔkti*	*phiŋkhɔʔki*
1pe→2/3	*phiŋkhɔkta*	*phiŋkhɔʔka*
2s→3s	*aphiŋkhɔtnta*	*aphiŋkhɔtndɨ*
2s→3d	*aphiŋkhɔtnšti*	*aphiŋkhɔtnši*
2s→3p	*aphiŋkhɔtntini*	*aphiŋkhɔtndini*
2d→3	*aphiŋkhɔšti*	*aphiŋkhɔtntši*
2p→3	*aphiŋkhɔštini*	*aphiŋkhɔtntšini*
3s→3s	*phiŋkhɔtnta*	*phiŋkhɔtndɨ*
3s→3d 3d→3s 3d→3d	*phiŋkhɔtnšti*	*phiŋkhɔtnši*
3s→3p 3d→3p 3p→3s 3p→3d 3p→3p	*phiŋkhɔtntini*	*phiŋkhɔtndini*
2s/3s→1s	*aphiŋkhɔštə*	*aphiŋkhɔtntšə*
2d/3d→1s	*aphiŋkhɔštəšɨ*	*aphiŋkhɔtntšəšɨ*
2p/3p→1s	*aphiŋkhɔštənɨ*	*aphiŋkhɔtntšənɨ*
3→1di	*aphiŋkhɔšti*	*aphiŋkhɔtntši*
2/3→1de	*aphiŋkhɔštɨ*	*aphiŋkhɔtntšɨ*
3→1pi	*aphiŋkhɔkti*	*aphiŋkhɔʔki*
2/3→1pe	*aphiŋkhɔkta*	*aphiŋkhɔʔka*
3→2s	*aphiŋkhɔšta*	*aphiŋkhɔtntša*
3→2d	*aphiŋkhɔšti*	*aphiŋkhɔtntši*
3→2p	*aphiŋkhɔštini*	*aphiŋkhɔtntšini*

tšɛnnɨ vt-5b *tšɛnd/tšɛn-tšɛntš/tšɛš-tšɛ-tšɛn*, teach; Nep. *sikāunu*.

1s→2s	*tšɛnta*	*tšɛnna*
1s→2d	*tšɛnšišti*	*tšɛnšiši*
1s→2p	*tšɛntini*	*tšɛnnini*
1s→3s	*tšɛntə*	*tšɛndu*
1s→3d	*tšɛntəšɨ*	*tšɛndɨšɨ*
1s→3p	*tšɛntəni*	*tšɛndɨni*
1di→2/3	*tšɛšti*	*tšɛntši*
1de→2/3	*tšɛštɨ*	*tšɛntšɨ*
1pi→2/3	*tšɛkti*	*tšɛnki*
1pe→2/3	*tšɛkta*	*tšɛnka*
2s→3s	*atšɛnta*	*atšɛndɨ*
2s→3d	*atšɛšti*	*atšɛntši*
2s→3p	*atšɛntini*	*atšɛndini*
2d→3	*atšɛšti*	*atšɛntši*
2p→3	*atšɛštini*	*atšɛntšini*
3s→3s	*tšɛnta*	*tšɛndɨ*
3s→3d 3d→3s 3d→3d	*tšɛšti*	*tšɛntši*
3s→3p 3d→3p 3p→3s 3p→3d 3p→3p	*tšɛntini*	*tšɛndini*
2s/3s→1s	*atšɛštə*	*atšɛntšə*
2d/3d→1s	*atšɛštəšɨ*	*atšɛntšəšɨ*
2p/3p→1s	*atšɛštəni*	*atšɛntšəni*
3→1di	*atšɛšti*	*atšɛntši*
2/3→1de	*atšɛštɨ*	*atšɛntšɨ*
3→1pi	*atšɛkti*	*atšɛnki*
2/3→1pe	*atšɛkta*	*atšɛnka*
3→2s	*atšɛšta*	*atšɛntša*
3→2d	*atšɛšti*	*atšɛntši*
3→2p	*atšɛštini*	*atšɛntšini*

The sixth transitive conjugation consists solely of verbs lacking a stem-final consonant. The first conjugation, however, also contains at least one such verb. To date I have counted 8 verbs in the sixth conjugation proper, vt-6a, but the frequency of vt-6a verbs is far

tion proper distinguish four different stems: a Σ_1 in 1s→3 forms; a Σ_2 in 1s→2 forms, forms with a first dual or first plural actant, 2d→3 forms and 3→2d forms; a Σ_3 in 2s→3 and 3→3 forms; and a Σ_4 in forms with a first singular patient, 3→2s, 3→2p and 2p→3 forms.

The Σ_1, Σ_2, Σ_3 and Σ_4 of vt-6a verbs have the stem vowels */a/*, */u/*, */ɨ/* and */ɔ/* respectively.

There are also at least three verbs which belong to the minor transitive sixth conjugation, vt-6b, which differs from the sixth conjugation proper, vt-6a, in that it distinguishes only two different stems: a Σ_2 in forms with a first singular patient, 3→2s, 3→2p and 2p→3 forms; and a Σ_1 in all other forms. The Σ_2 of vt-6b verbs therefore shows the same distribution as the Σ_4 of vt-6a verbs. A possible explanation for this phenomenon lies in the difference in stem vowel between vt-6a and vt-6b verbs. The stem vowel of vt-6b verbs is */i·/* in the Σ_1 and */e·/* in the Σ_2.

The Σ_4 stem vowel of vt-6a and vt-6b conjugation verbs is lengthened in preterit 3s→2s, 2p→3 and 3→2p forms unless long already. The Σ_1 stem vowel is lengthened in preterit 1s→3 forms (cf. §2.2.4).

The complete (non-negated) simplex conjugations of the sixth conjugation verbs *šunɨ* vt-6a "escort, deliver" and *bi·nɨ* vt-6b "give" are as follows:

šunɨ vt-6a *ša-šuy/šu-šɨ-šɔ*, 1) escort, deliver; Nep. *puryāunu*; 2) dimittive aspectivizer; Nep. *paṭhāunu*.

1s→2s	*šunta*	*šunna*
1s→2d	*šušti*	*šuši*
1s→2p	*šuntini*	*šunni*
1s→3s	*šaŋtə*	*ša·ŋu*
1s→3d	*šaŋtəšɨ*	*ša·ŋɨšɨ*
1s→3p	*šaŋtənɨ*	*ša·ŋɨnɨ*
1di→2/3	*šuti*	*šuyi*
1de→2/3	*šutɨ*	*šuyɨ*
1pi→2/3	*šukti*	*šuki*
1pe→2/3	*šukta*	*šuka*
2s→3s	*ašɨta*	*ašɨ*
2s→3d	*ašɨšti*	*ašɨši*
2s→3p	*ašɨtini*	*ašɨni*
2d→3	*ašuti*	*ašuyi*

2p→3	*ašɔtini*	*ašɔ·ni*
3s→3s	*šɨta*	*šɨ*
3s→3d, 3d→3s, 3d→3d	*šɨšti*	*šɨši*
3s→3p, 3d→3p, 3p→3s, 3p→3d, 3p→3p	*šɨtini*	*šɨni*
2s/3s→1s	*ašɔtə*	*ašɔŋə*
2d/3d→1s	*ašɔtəšɨ*	*ašɔŋəšɨ*
2p/3p→1s	*ašɔtənɨ*	*ašɔŋənɨ*
3→1di	*ašuti*	*ašuyi*
2/3→1de	*ašutɨ*	*ašuyɨ*
3→1pi	*ašukti*	*ašuki*
2/3→1pe	*ašukta*	*ašuka*
3→2s	*ašɔta*	*ašɔ·*
3→2d	*ašuti*	*ašuyi*
3→2p	*ašɔtini*	*ašɔ·ni*

bi·nɨ vt-6b *bi·y/bi··bə·*, give something to someone, endow (patient agreement with recipient, not object given); Nep. *dinu*.

1s→2s	*bi·nta*	*bi·nna*
1s→2d	*bi·nšišti*	*bi·nšiši*
1s→2p	*bi·ntini*	*bi·nnini*
1s→3s	*bi·ŋtə*	*bi·ŋu*
1s→3d	*bi·ŋtəšɨ*	*bi·ŋɨšɨ*
1s→3p	*bi·ŋtənɨ*	*bi·ŋɨnɨ*
1di→2/3	*bi·ti*	*bi·yi*
1de→2/3	*bi·tɨ*	*bi·yɨ*
1pi→2/3	*bi·kti*	*bi·ki*
1pe→2/3	*bi·kta*	*bi·ka*
2s→3s	*abi·ta*	*abi·*
2s→3d	*abi·šti*	*abi·ši*
2s→3p	*abi·tini*	*abi·ni*
2d→3	*abi·ti*	*abi·yi*
2p→3	*abe·tini*	*abe·ni*
3s→3s	*bi·ta*	*bi·*
3s→3d, 3d→3s, 3d→3d	*bi·šti*	*bi·ši*

3s→3p 3d→3p 3p→3s 3p→3d 3p→3p	*bi·tini*	*bi·ni*
2s/3s→1s	*abe·tə*	*abe·ŋə*
2d/3d→1s	*abe·təšɨ*	*abe·ŋəšɨ*
2p/3p→1s	*abe·tənɨ*	*abe·ŋənɨ*
3→1di	*abi·ti*	*abi·yi*
2/3→1de	*abi·tɨ*	*abi·yɨ*
3→1pi	*abi·kti*	*abi·ki*
2/3→1pe	*abi·kta*	*abi·ka*
3→2s	*abe·ta*	*abe·*
3→2d	*abi·ti*	*abi·yi*
3→2p	*abe·tini*	*abe·ni*

The seventh conjugation is an anomalous conjugation containing only one verb *mɨnnɨ* "to do". It is characterised by a pattern of stem alternation involving six different stems: a Σ_1, *ma*, in 1s→3 forms; a Σ_2, *mɨtš/mɨš*, in forms with a first singular patient or first dual actant and 3→2 forms; a Σ_3, *mɨt*, in forms with a first plural actant; a Σ_4, *mɨ*, in 1s→2, 2s→3 and 3→3 forms; a Σ_5, *muy/mu*, in 2d→3 forms; and a Σ_6, *mɔ*, in 2p→3 forms. The complete (non-negated) simplex conjugation of *mɨtnɨ* is as follows:

mɨnnɨ vt-7 *ma-mɨtš/mɨš-mɨt-mɨ-muy/mu-mɔ*, [dir. < *mɨnɨ* vt-6a "do"] 1) do something (inanimate patient), do something unto someone (animate patient); Nep. *garnu*; 2) (with *tɨmlə*) converse, talk [calque < Nep. *kurā garnu*]; 3) (with *gɔlpɨ* "big") raise someone (Nep. *ṭhūlo pārnu*), cf. *tɨlnɨ*.

1s→2s	*mɨnta*	*mɨnna*
1s→2d	*mɨnšɨšti*	*mɨnšɨši*
1s→2p	*mɨntini*	*mɨnnini*
1s→3s	*maŋtə*	*ma·ŋu*
1s→3d	*maŋtəšɨ*	*ma·ŋɨšɨ*
1s→3p	*maŋtənɨ*	*ma·ŋɨnɨ*
1di→2/3	*mɨšti*	*mɨtši*
1de→2/3	*mɨštɨ*	*mɨtšɨ*
1pi→2/3	*mɨʔkti*	*mɨʔki*
1pe→2/3	*mɨʔkta*	*mɨʔka*
2s→3s	*amɨta*	*amɨ*
2s→3d	*amɨšti*	*amɨši*
2s→3p	*amɨtini*	*amɨni*
2d→3	*amuti*	*amuyi*

2p→3	*amɔtini*	*amɔ·ni*
3s→3s	*mɨta*	*mɨ*
3s→3d, 3d→3s, 3d→3d	*mɨšti*	*mɨši*
3s→3p, 3d→3p, 3p→3s, 3p→3d, 3p→3p	*mɨtini*	*mini*
2s/3s→1s	*amɨštə*	*amɨtšə*
2d/3d→1s	*amɨštəšɨ*	*amɨtšəšɨ*
2p/3p→1s	*amɨštənɨ*	*amɨtšənɨ*
3→1di	*amɨšti*	*amɨtši*
2/3→1de	*amɨšti*	*amɨtši*
3→1pi	*amɨʔkti*	*amɨʔki*
2/3→1pe	*amɨʔkta*	*amɨʔka*
3→2s	*amɨšta*	*amɨtša*
3→2d	*amɨšti*	*amɨtši*
3→2p	*amɨštini*	*amɨtšini*

§2. Morphemic Analysis of Verbal Affixes

Dumi Rai simplicia have eight suffixal and two prefixal slots. The following table presents an overview of the slots and slot fillers:

pf1 Person slot:

<*ham*->	third plural subject (3pS)
<*a*->	the marked scenario morpheme (MS)

pf2 Preterit negative slot:

<*mə*->	the preterit negative morpheme (NEG)

sf1 Reflexive slot:

<-*nši*>	reflexive (REF)

sf2 First person slot:

<-*n*>	the 1s→2 morpheme
<-*k*>	first person plural actant (1p)
<-*ŋ*>	first first singular morpheme (1s)

sf3 Copy slot:

<-*ši*>	reflexive copy (REF)
<-*n*>	1s→2 copy
<-*ši*>	anticipatory copy of the d23 morpheme
<-*i*>	anticipatory copy of the exclusive morpheme (e)
<-*i*>	anticipatory copy of the inclusive morpheme (i)

sf4 Tense:

<-*t*>	non-preterit (NPT)
<-*ø*>	preterit (PT)

sf5 Person slot:

<-*ə*>	second first singular morpheme (1s)
<-*u*>	the 1s→3/PT *portemanteau*
<-*i*>	inclusive morpheme (i)
<-*i*>	exclusive morpheme (e)
<-*a*>	the second and third person subject morpheme (23S)
<-*i*>	the 3sP/PT *portemanteau*

sf6 Number slot:

<-*i*>	dual morpheme (d)
<-*a*>	second/third person singular morpheme (s23)
<-*ši*>	second/third person dual morpheme (d23)
<-*ini*>	second/third person plural morpheme (p23)

sf7 Third first singular morpheme slot

<-*i*>	third first singular morpheme (1s)

sf8 Negation:

<-*nə*>	negative morpheme (NEG)

§2.1. Prefixes

The two prefixal slots are the person slot (pf1) and the preterit negative slot (pf2).

§2.1.1. The third plural subject morpheme

basic morph: <*ham-*>
label: 3pS

The prefix <*ham-*> indicates third plural subject in intransitive and reflexive forms, e.g. (1) & (2). The 3pS prefix is a pf1 filler.

(1) *Ǩambham khikɨ-bi lɛpt-ø-ini-kə ham-kɔm-ši-ø*
lichen glue-LOC patch-PT-p23-pfG 3pS-cover-REF-PT
ʔə.
REP
It is said that [Primitive Man before the invention of the loom] patched lichens together with glue and clothed themselves [therewith].

(2) *Bhiʔi-mɨl ham-bɨkh-ø-a*.
cow-p 3pS-bear‿young[3]-PT-23S
The cows calved.

§2.1.2. The marked scenario prefix <*a-*>

basic morph: <*a-*>
label: MS

The prefix <*a-*> is a pf1 filler which divides all simplicia into two groups. Its distribution in simplex forms defines two distinct sets of verbal scenarios. The formally unmarked set comprises intransitive and reflexive scenarios involving a first or third person actant and the following transitive relationships:

1→2
1→3
3→3

The marked scenario prefix occurs in verb forms defining an intransitive or reflexive scenario involving a second person actant or denoting one of the following transitive relationships:

2→1
3→1
3→2
2→3

This pattern of unmarked and marked verb forms reflects a pronominal markedness hierarchy of pragmatically more vs. less obvious scenarios, at least to the mind of the author if not in the mind of the native speakers of Dumi Rai. Of the 67 example sentences in this article, the following contain marked scenarios: (5), (6), (31), (34), (40), (44), (46), (49), (52), (53), (55), (56), (57), (59) & (65).

§2.1.3. The preterit negative morpheme

basic morph: <*mə-*>
label: NEG

Unlike the negative suffix <*-nə*> (§2.2.16) which is suffixed to *all* negated simplex forms, the preterit negative morpheme <*mə-*> is prefixed to all negative *preterit* simplicia, e.g. (3)-(5). The preterit negative morpheme is a pf2 filler, and it has a regular allomorph in zero following the marked scenario morpheme <*ə-*>, e.g. (5).

(3) *Aŋ-ə tɔm khələ ŋə kɨř-nɨ*
I-ERG that all EMPH carry-INF
mə-tsə·pt-u-ø-nə.
NEG-be‿able-1s→3/PT-s23-NEG
I wasn't able to carry all of that.

(4) *Apə· ŋə həm-mə-yə··-ø-nə?*
before EMPH 3pS-NEG-come‿down-PT-NEG
Haven't they already come down?

(5) *O-kho· hɛmpə gɔ··-t-ə? o-kho· hɛmpə ə-tɨ-ø?*
my-pot where be-NPT-23S my-pot where MS-put-3sP/PT
... *aŋ-ə ə·tš-ø-ə-m*[4]
... I-ERG say-PT-1s-NOM
ə-ø-ŋyi··-ø-nə?
MS-NEG-hear-3sP/PT-NEG
Where is my pot? Where did you put my pot?
... Didn't you hear what I said?

§2.2. Suffixes

There are eight suffixal slots in the suffixal string of a Dumi Rai simplex. The slots and their fillers will be discussed under the separate morphemes below.

The function of the third suffixal position is that of a copy slot. Certain morphemes in the suffixal string appear as copies in sf3, in certain instances apparently in order to disambiguate the form by preventing homophony or to prevent consonant clusters, and in other cases for no apparent reason. The copied morpheme may, in its regular position, either precede sf3 in the suffixal string (e.g. the reflexive and the 1s→2 morphemes) or follow it (e.g. the d23, inclusive and exclusive morphemes). In the latter case, the copied morpheme is an anticipatory copy. The conditions under which a given morpheme is copied in sf3 are specified below in the section on the morpheme concerned.

§2.2.1. The reflexive morpheme

basic morph:	*<-nši>*
label:	REF

The morpheme *<-nši>* occurs in reflexive forms where it signals a reflexive relationship. This morpheme is a suffixal slot 1 filler and is affixed immediately to the stem.

After plosive stem-finals, the initial */n/* of the reflexive suffix assimilates for place of articulation, e.g. *yɔkŋ'šiniɨ* 'split the scene, depart', *dzi·tn'šiniɨ* 'get oneself wet', *da·pm'šiniɨ* 'be stricken'.

$$\text{-nši} \rightarrow \left\{ \begin{array}{c} \text{ŋši} \\ \text{nši} \\ \text{mši} \end{array} \right\} / \left\{ \begin{array}{c} k \\ t \\ p \end{array} \right\} \text{\_\_\_\_}$$

After stems ending in */ř/*, */n/* and */m/*, the initial nasal of the reflexive morpheme is dropped, e.g. *šiř'šiniɨ* 'bathe', *tšɛn'šiniɨ* 'learn', *kɨm'šiniɨ* 'bend over'.

$$\text{-nši} \rightarrow \text{-ši} / \left\{ \begin{array}{c} ř \\ n \\ m \end{array} \right\} \text{\_\_\_\_}$$

Reflexive verbs with stem-final */l/* are not attested.

The initial */n/* of the reflexive morpheme is also dropped after the open stem of the verb *imdə·'šiɲɨ* 'be asleep', but this case is anomalous. The verb *imdə·'šiɲɨ* is the resultatively aspectivized reflexive form of unattested **imɲɨ* 'sleep' (cf. the TB *-*t* directive derivative *i·pɲɨ* vt-2c *i·pt/i·p-i·ph/i·p* 'put to bed, put to sleep'). The anomaly lies in the fact that the resultative aspectivizer *də·ɲɨ* vt-4 *dit-ditš/diš-det* loses its stem-final in 1s→2d forms and before the reflexive suffix <-*nši*> and infinitive suffix <-*ɲɨ*>. Moreover, the 1s→2 morpheme <-*n*> is realized as zero in 1s→2d forms of the aspectivizer *də·ɲɨ*, and, in the reflexive forms of the resultative aspectivizer, the reflexive morpheme <-*nši*> loses its initial nasal segment.

Stem-final */ŋ/* assimilates with the initial nasal of the reflexive morpheme to yield palatal *ñ*, [ɲ], e.g. *tha·ñ'šiɲɨ* 'descend'. A similar regressive assimilation is attested in the palatalization of velar */ŋ/* before front vowels in Hakkanese or *Kèjīā* (Hashimoto 1973: 101-102).

The reflexive morpheme is copied in the form of its allomorph <-*ši*> in the copy slot, sf3, in non-singular reflexive forms with an actant number morpheme in sf6, viz. the 1di, 1de, 2d, 2p and 3d forms, e.g. (6)-(8).

(6) *A-ya·t-nši-ši-ø-ni*
MS-be_embarrassed-REF-REF-PT-p23
You^{p} were embarrassed.

(7) *Wa·t-nši-š-ø-ɨ-ø.*
put_on_jewelry-REF-REF-PT-e-d
We^{de} put on jewelry.

(8) *Aina-bi do·khɔt-nši-š-ø-i-ø.*
mirror-LOC look-REF-REF-PT-i-d
We^{di} looked at ourselves in the mirror.

It might be argued that copying of the reflexive morpheme serves to prevent homophony. Without an overt copy of the reflexive morpheme, dual exclusive reflexives would be homophonous with first singular reflexives, e.g. (7), (9). Likewise, first dual inclusive reflexives would, without an overt copy of the reflexive morpheme, be homophonous with third singular reflexives, e.g. (8), (10). However, dual inclusive reflexives *are* homophonous with third dual reflexives[5], e.g. (8), (11).

(9) *Wa·t-nš-ø-ɨ.*
put_on_jewelry-REF-PT-1s
I put on jewelry.

(10) *Aina-bi do·khɔt-nši-ø-ø.*
mirror-LOC look-REF-PT-s23
He looked at himself in the mirror.

(11) *Aina-bi do·khɔt-nši-š-ø-i.*
mirror-LOC look-REF-REF-PT-d
They[d] looked at themselves in the mirror.

The reflexive morpheme has a regular allomorph <*-nš*> and its copy a regular allomorph <*-š*> before vowels, i.e. the third first singular morpheme <*-ɨ*>, the inclusive morpheme <*-i*> and the exclusive morpheme <*-ɨ*>, e.g. (7), (8), (9), (11).

-nši → *-nš* / _____ V

When there are no intervening morphemes between them, the nonpreterit suffix <*-t*> (§2.2.5) becomes fused into the reflexive morpheme or its copy, yielding <*-nšti, -šti*>:

(12) *ɨm-a ɨ-hop-ŋə do·khɔt-nšti-ø.*
he-ERG his-self-EMPH see-REF(NPT)-s23
He sees himself.

(13) *ɣa·n-št-ɨ.*
sit_down-REF(NPT)-1s
I'll sit down.

In the infinitive, the element */-ši/* of the reflexive morpheme takes the stress, e.g. *yɔkŋ'šinɨ* 'split the scene, scram'. In inflected forms, the stress is regular, i.e. on the verb root:

(14) *'Yɔk-ŋši-š-ø-i-kə khutš-ø-ø-i ʔe.*
split-REF-REF-PT-d-pfG go-PT-23S-d REP
It is said that, having split up, they[d] went their separate ways.

§2.2.2. The 1s→2 morpheme

basic morph: <-*n*>
label: 1s→2

The morpheme occurs in all 1s→2 forms and signals a transitive relationship between a first person singular agent and second person patient. This morpheme is a sf2 filler.[6] It is attached immediately to the verb stem.

After the plosives */p/*, */t/* and */k/*, the 1s→2 ***portemanteau*** assimilates for place of articulation and becomes a homorganic nasal, e.g. (15)-(17).

$$\text{<-}n\text{>} \rightarrow \left\{ \begin{array}{l} /ŋ/ \\ /n/ \\ /m/ \end{array} \right\} / \left\{ \begin{array}{l} /k/ \\ /t/ \\ /p/ \end{array} \right\} \text{ ——}$$

(15) *Lup-m-šti.*
grab-1s→2-d23(NPT)
I'll get you[d].

(16) *Yək-ŋ-t-ini.*
feed-1s→2-NPT-p23
I'll feed you[P].

(17) *Dzi·t-n-t-a.*
make_wet-1s→2-NPT-s23
I'll make you[s] wet.

The 1s→2 morpheme <-*n*> assimilates to the preceding liquids */r/* and */l/* and nasals */m/* and */ŋ/* in regular lento speech, e.g. (18)-(21).

$$-n \rightarrow \left\{ \begin{array}{l} /r/ \\ /l/ \\ /m/ \\ /ŋ/ \end{array} \right\} / \left\{ \begin{array}{l} /r/ \\ /l/ \\ /m/ \\ /ŋ/ \end{array} \right\} \text{ ——}$$

In allegro speech, the 1s→2 morpheme <-*n*> is reduced to zero following */r/*, */l/*, */m/* and */ŋ/*, e.g. (22) & (23).

$$-n \rightarrow \text{ø} / \left\{ \begin{array}{l} /r/ \\ /l/ \\ /m/ \\ /ŋ/ \end{array} \right\} \text{ ——}$$

(18) *Tsi·ŋ-ŋ-t-ini.*
hate-1s→2-NPT-p23
I hate you^{P}.

(19) *Tɨl-l-n-ø-ini*
raise-1s→2-1s→2-PT-p23
I raised you^{P}.

(20) *Yəm-m-ši-šti!*
hit-1s→2-d23-d23(NPT)
I'll hit you both!

(21) *Tsəř-ř-n-ø-ini.*
pay-1s→2-1s→2-PT-p23
I paid you^{P}.

(22) *Tsəř-ø-ø-ni.*
pay-1s→2-PT-p23
I paid you^{P}.

(23) *Dɨm-ø-t-a.*
run_into-1s→2-NPT-s23
I'll run into you.

Likewise, the 1s→2 *portemanteau* is copied in sf3 in preterit 1s→2s and 1s→2p forms, e.g. (19), (21). The 1s→2 copy <-*n*> is realized as /*n*/ and, unlike the 1s→2 *portemanteau* of which it is a copy, does not assimilate to a preceding /*r*/, /*l*/, /*m*/ or /*ŋ*/. The 1s→2 copy occurs after stem final /*ŋ*/ in preterit 1s→2s forms but not in preterit 1s→2p forms, e.g. *hɨŋŋna* 'I waited for you^{s}' and *šiŋŋna* 'I asked you^{s}', but *hɨŋŋini* 'I waited for you^{P}' and *šiŋŋini* 'I asked you^{P}'. Forms such as **hɨŋŋnini* or **hɨŋnini* and **šiŋŋnini* or **šiŋnini* are rejected. Moreover, there is no 1s→2 copy in forms in preterit 1s→2p forms in which the 1s→2 morpheme itself is realized as zero, viz. in allegro speech following stem final /*l*/, /*r*/, /*ŋ*/ or /*m*/. For example, utterance (22) is the allegro form of utterance (21), and *hɨŋni* 'I waited for you^{P}' and *šiŋni* 'I asked you^{P}' are the allegro forms of preterit 1s→2p *hɨŋŋini* and *šiŋŋini* respectively.

After a stem in final /*n*/, the 1s→2 morpheme <-*n*> is not copied in sf3, e.g. *bənna* 'I felt you^{s}', *bənnini* 'I felt you^{P}', not **bənnna* or **bənnnini*.

After vowel-final stems of verbs belonging to transitive conjugations 1, 5, 6b and 7, the 1s→2 *portemanteau* occurs in its neutral form /*n*/, e.g. (24) & (25).

After vowel-final stems of verbs belonging to transitive conjugations 4 and 6a, the 1s→2 morpheme <-*n*> is realized as /*n*/ in 1s→2s and 1s→2p forms but as zero in 1s→2d forms, e.g. (26)-(28).

(24) *Bi·-n-n-ø-a.*
give-1s→2-1s→2-PT-s23
I gave [it] to you^{s}.

(25) *Thi·-n-ši-šti*
trip-1s→2-d23-d23(NPT)
I'll trip you^{d}.

(26) *Phiŋ-šu-n-t-ini.*
send-disptach-1s→2-NPT-p23
I'll send [it] to you^{p}.

(27) *Phiŋ-šu-ø-ø-ši.*
send-dispatch-1s→2-PT-d23
I sent [it] to you^{d}.

(28) *Šu-n-pə-ø-ši-šti.*
escort-1s→2-bring_to-1s→2-d23-d23(NPT)
I'll escort you^{d} [there].

§2.2.3. The first person plural morpheme

basic morph: <-*k*>
label: 1p

The suffix <-*k*> indicates plural first person actant. It is a slot 2 filler and precedes all morphemes in a suffixal string except, in reflexive forms, the reflexive morpheme.

(29) *Ba·p-k-ø-i-kə ka·n-k-ø-i.*
upset-1p-PT-i-pfG spill-1p-PT-i
Having upset it, we spilt it.

(30) *Šiř-ši-k-t-a.*
bathe-REF-1p-NPT-e
We're going to bathe.

(31) *A-šiŋ-k-i-t-i.*
MS-ask-1p-i-NPT-i
They'll ask us.

§2.2.4. The first first person singular morpheme

basic morph: <-ŋ>
label: 1s

The first first singular morpheme <-ŋ> occurs as a sf2 filler in the 1s→3 and preterit 2/3→1s forms of transitive verbs and the 1s forms of intransitive verbs:

(32) *Dza-ŋ-t-ə.*
eat-1s-NPT-1s
I'll eat it.

(33) *Thi·-ŋ-ɨ-š-ɨ.*
trip-1s-1s→3/PT-d23-1s
I tripped them^{d}.

(34) *A-be·-šɔ-ŋ-ø-ə-n-ɨ.*
MS-give-dispatch-1s-PT-1s-p23-1s
They^{P} gave it away to me.

(35) *Wa?wa? ma·-ŋ-u.*
vomit do-1s-1s→3/PT
I threw up.

The first first singular morpheme <-ŋ> is retained only in verbs with an open stem. Verbs without a stem final consonant include some verbs in conjugations vi-1 and vt-1 and all verbs in conjugations vi-2, vi-4, vt-6a and vt-6b. The first 1s suffix <-ŋ> occurs in all open stem verbs except open stem vi-1 verbs. Although quite a number of vi-1 verbs have an open stem, only the labile verb *ŋyi·nɨ* 'hear' takes the first 1s suffix <-ŋ> in the first singular preterit. In preterit 1s→3 forms, but not in preterit 2/3→1s forms, the stem vowel preceding the first first person morpheme <-ŋ> is lengthened unless long already, e.g. (35) vs. *wa?wa? maŋtə* 'I shall throw up' (cf. §1.2).

The sf2 filler morphemes, the first first person morpheme <-ŋ>, the 1s→2 *portemanteau* <-n> (§2.2.2) and the first plural morpheme <-k> (§2.2.3) occur not only as suffixes, but also occur as infixes in aspectivized compounds. Aspectivized compound verbs will not be dealt with in this article except inasmuch as they are relevant to the affixal morphology of simplicia. In brief, aspectivized compound verbs consist of a verb stem and an aspectivizer. An aspectivizer serves to add a semantic

dimension, viz. a specific *Aktionsart* (e.g. resultative, allative, ponent, dimittive, etc.), to the meaning of the aspectivized verb. Unlike causative combinations, where the causativized verb acts as a preverb, aspectivized compounds act as a single verb stem. Prefixes are attached to the first syllable of the aspectivized verb and suffixes to the last syllable of the aspectivizer.

However, when the aspectivized verb has an open stem, the three morphemes occurring as sf2 fillers, i.e. the 1s→2 morpheme <*-n*>, the first person plural actant morpheme <*-k*> and the first first singular morpheme <*-ŋ*>, occur as infixes in the aspectivized compound verb, e.g. (28), (36) & (37).

The paradigmatic distribution of the first person plural actant morpheme <*-k*> and the 1s→2 *portemanteau* <*-n*> as infixes is the same as when they are suffixes. In contrast, the occurrence of the first first singular morpheme <*-ŋ*> as an infix in aspectivized compound verbs is limited to 1s→3 forms, e.g. (37); it does not occur as an infix in preterit 2/3→1s forms of open stem verbs, as it does when a suffix, e.g. (34).

As an infix, the first person plural morpheme <*-k*> assimilates for voice when followed by a voiced consonant, e.g. (36).

(36) *bi·-g-dəʔ-k-t-ə.*
give-1p-get_done-1p-NPT-e
We'll^{p} hand it over [to you].

(37) *Šə-ŋ-tə-ŋ-t-ə-n-i.*
deliver-1s-put-1s-NPT-1s-p23-1s
I'll escort them^{p} [there].

§2.2.5. Tense

the nonpreterit morpheme

basic morph: <*-t*>
label: NPT

the preterit morpheme

basic morph: <*ø*>
label: PT

Nonpreterit tense is always marked by the morpheme <*-t*>. The nonpreterit suffix is a tense slot, sf4, filler, e.g.

(5), (16)-(18), (23), (26), (30)-(32), (36)-(39), (43), (44), (46)-(48), (52), (54), (55), (57), (58), (65) & (67).

When the nonpreterit morpheme is immediately adjacent to the d23 or the REF morpheme in a suffixal string without intervening morphemes between them, the preterit morpheme becomes infixed into the reflexive morpheme <-*nši*, -*ši*> (§2.2.1) and the second/third person dual morpheme <-*ši*> (§2.2.14):

<-*t*> + <*ši*> → <-*š-t-i*>
NPT d23 d23(NPT)

<-*nši*> + <-*t*> → <-*nš-t-i*>
REF NPT REF(NPT)

This fused sequence is indicated in morpheme glosses with the infixed tense morpheme between parentheses: d23(NPT), REF(NPT), e.g. (12), (13), (15), (20), (25), (28), (60), (61) & (62).

The preterit morpheme is zero, e.g. (1), (2), (4)-(11), (14), (19), (21), (22), (24), (27), (29), (34), (40), (45), (49), (50), (53), (56), (59), (63), (64) & (66). It occurs as an sf4 filler in all preterit simplicia except those in which the notion preterit is expressed by the 1s→3/PT or 3sP/PT *portemanteau*, <-*u*> and <-*ɨ*>, in suffixal slot 5, e.g. (3), (5), (33), (35), (41), (42), (51).

§2.2.6. The second first person singular morpheme

basic morph: <-*ə*>
label: 1s

The second first singular morpheme is a filler of the person slot, sf5. The second 1s morpheme <-*ə*> signals first person involvement. First singular involvement is always marked: It is indicated by the second 1s morpheme <-*ə*>, except in reflexive forms, where it is indicated by the second first singular morpheme <-*ɨ*>, and in preterit 1s→3 forms, where it is indicated by the 1s→3/PT *portemanteau* <-*u*>. First person involvement may be marked twice or thrice in a suffixal string when either the first 1s morpheme <-*ŋ*> and/or third 1s morpheme <-*ɨ*> co-occurs with the second 1s <-*ə*> in the same verb form. The distribution of the first and third 1s morphemes, <-*ŋ*> and <-*ɨ*>, is treated under §2.2.4 and §2.2.16 respectively.

The nature of the first singular involvement signaled by the suffix <-*ə*> is determined by its co-occurrence with

other morphemes in a given verb form. The first singular involvement indicated in intransitive verbs is that of subject, e.g. (38). In transitive verbs the nature of the first singular involvement is that of agent, e.g. (39), unless there is a marked scenario prefix <*a*-> (§2.1.2) to indicate otherwise, e.g. (40).

(38) *Khuš-t-ə.*
go-NPT-1s
I'm going.

(39) *Lum-t-ə-n-i.*
search-NPT-1s-p23-1s
I'm looking for them.

(40) *Tšimi-mil-ʔa aŋ a-ka·tš-ø-ə-n-i ʔe.*
deity-p-ERG I MS-bite-PT-1s-p23-1s REP
They say the deities have afflicted me.

§2.2.7. The 1s→3/PT *portemanteau*

basic morph: <-*u*>
label: 1s→3/PT

The 1s→3/PT morpheme signals a transitive relationship between a first singular agent and a third person patient in the preterit. The 1s→3/PT *portemanteau* has a regular allomorph <-*i*> before the d23 and p23 morphemes <-*ši*> and <-*ini*>:

(41) *Šiŋ-u-ø.*
ask-1s→3/PT-s23
I asked him.

(42) *Šiŋ-i-š-i*
ask-1s→3/PT-d23-1s
I asked them[d].

§2.2.8. The inclusive morpheme

basic morph: <-*i*>
label: i

The inclusive suffix indicates inclusive in first person forms. The inclusive morpheme <-*i*> is a person slot filler, sf5. The inclusive morpheme can occur as a copy in the copy slot, sf3, in nonpreterit plural forms. Its occurrence as a

copy morpheme in nonpreterit plural forms is conditioned by the stem final. When the stem final is a vowel or /t/, the inclusive suffix is not copied. When the stem final is any consonant other than /t/, the inclusive suffix <-i> is copied in sf3, where it is situated between the first plural suffix <-k> and the nonpreterit suffix <-t>. This copying after consonant-final stems results in the sequence <-k-i-t-i> rather than <-k-t-i>, which avoids disallowed consonant clusters such as *-ŋkti, *-kkti or *-pkti.

(43) *Khup-t-i-ø*
winnow-NPT-i-d
We're^{di} winnowing.

(44) *A-bi·-t-i-ø*
MS-give-NPT-i-d
They'll give it to us^{di}.

§2.2.9. The exclusive morpheme

basic morph: <-ɨ>
label: e

The exclusive suffix indicates exclusive in first person forms. The morpheme is a sf5 filler. In plural forms it has a regular allomorph in <-a>. Like the inclusive morpheme, the exclusive morpheme can occur as a copy, <-ɨ>, in sf3 in nonpreterit plural forms. Its occurrence as a copy morpheme is conditioned by the stem final. When the stem final is a vowel or /t/, the exclusive suffix is not copied in sf3. When the stem final is any consonant other than /t/, the exclusive suffix is copied as <-ɨ> in sf3 between the first plural suffix <-k> in sf2 and the nonpreterit suffix <-t> in sf4. This copying after consonant-final stems results in the sequence <-k-ɨ-t-a> rather than <-k-t-a>, which avoids disallowed consonant clusters such as *-ŋkta, *-kkta or *-pkta.

(45) *Sɐ·wa khɔtntš-ø-ɨ-ø.*
obeisance proffer-PT-e-d
We^{de} greeted her formally.

(46) *A-ləm-k-ɨ-t-a ʔe.*
MS-search-1p-e-NPT-e REP
She said they're looking for us^{pe}.

§2.2.10. The second and third person subject morpheme

basic morph: <-*a*>
label: 23S

The suffix <-*a*> is a person slot, sf5, filler and indicates a non-first person actant in intransitive verbs, e.g. (2), (47), (48). It has a regular allomorph in zero after a vowel. Its zero allomorph occurs in second and third dual forms before the dual morpheme <-*i*> and in second plural forms before the p23 morpheme <-*ini*>, e.g. (49). The s23 morpheme is also zero when attached immediately to an open verb stem. This occurs in the 2s, 3s and 3p forms of open stem intransitive verbs in the preterit, e.g. (50). Verbs without stem final consonants include verbs of conjugation vi-1 and vt-1 and all verbs of conjugations vi-2, vi-4, vt-6a and vt-6b.

(47) *Sa?lɨ hɨš-t-a-ø.*
jungle burn-NPT-23S-s23
The jungle is on fire.

(48) *O-řəm ŋyi·š-t-a-ø.*
my-body ache-NPT-23S-s23
My body aches.

(49) *A-phɨkh-ø-ø-ini ye·?*
MS-get_up-PT-23S-p23 Q
Are you guys up already or what?

(50) *Ham-ře·-ø-ø.*
3pS-laugh-PT-23S
They$_P$ laughed.

The following morphophonemic regularity applies to suffixes ending in /*a*/, i.e. the 23S morpheme <-*a*>, the s23 morpheme <-*a*> (§2.2.13) and the plural allomorph of the exclusive morpheme (§2.2.3). An /*a*/, when final in the suffixal string of a simplex, is raised to /*ɨ*/ before the perfect gerund suffix <-*kə*>, the imperfective aspect suffix <-*m*>, the particle of reported speech *?e*, the postposition of contingency *khɔ* 'if', and the negative suffix <-*nə*>.

$$/a/ \rightarrow /ɨ/ \; / \; \_\_ \; \left\{ \begin{matrix} -kə \\ -m \\ ʔe \\ khɔ \\ -nə \end{matrix} \right\}$$

With the exception of negation, these suffixes are not dealt with in this article.

§2.2.11. The third singular preterit patient morpheme

basic morph: <-ɨ>
label: 3sP/PT

The 3sP/PT *portemanteau* denotes third person patient in the preterit in 2s→3s and 3s→3s forms, e.g. (51). This *portemanteau* morpheme occupies the person slot, sf5. The 3sP/PT *portemanteau* <-ɨ> is realized as zero after a vowel. This occurs in the preterit 2s→3s and 3s→3s forms of verbs with an open stem, where the 3sP/PT *portemanteau* is suffixed immediately to the stem, e.g. (5).

(51) *ɨm-a bɨlɨ tsa·m-ɨ.*
he-ERG money lose-3sP/PT
He lost the money.

§2.2.12. The dual morpheme

basic morph: <-i>
label: d

The dual morpheme <-i> indicates duality of actant in intransitive and reflexive forms, e.g. (7), (8), (11), (14) & (54). In transitive forms, the dual morpheme <-i> indicates duality of first person and second person actant, e.g. (43), (44), (45), (52) & (53). The dual morpheme occupies the number slot, sf6. The dual morpheme elides after the inclusive and exclusive morphemes:

<-i>	+	<-i>	→	<-i>
i		d		di

<-ɨ>	+	<-i>	→	<-ɨ>
e		d		de

(52) *Timmǝlǝ a-phuš-t-i-nǝ?*
now MS-help-NPT-d-NEG
Won't he help you[d] now?

(53) *A-dhuy-ø-ø-i?*
MS-dig-PT-23S-d
Did you[d] dig the hole?

(54) *Bǝ·lǝ· li-t-ø-i me·!.*
goof_off perform-NPT-23S-d EXC
They[d]'re just loafing off.

§2.2.13. The second/third person singular morpheme

basic morph: <-*a*>
label: s23

The s23 morpheme <-*a*> signals the singularity of a second or third person actant. It occurs as a sf6 filler in 1s→2s, 3→2s, 23s→1s, 1s→3s and in nonpreterit 2s→3s and 3s→3s forms, e.g. (17), (23), (24), (56) & (57). The second/third person singular morpheme <-*a*> does not occur in preterit 2s→3s and preterit 3s→3s forms, where the notion of singular third person actant is expressed by the 3sP/PT *portemanteau* <-*i*>.

Like the homophonous 23S morpheme, the s23 morpheme <-*a*> has a regular allomorph in zero after vowels. The zero allomorph occurs in 23s→1s and nonpreterit 1s→3s forms after the second first singular morpheme <-*a*>, e.g. (58), in preterit 1s→3s forms after the 1s→3/PT *portemanteau* <-*u*>, e.g. (41), in 2s and 3s intransitive forms after the 23S morpheme <-*a*>, e.g. (47), (48) & (55), in 2s and 3s reflexives after the reflexive morpheme <-*nši*>, e.g. (10) & (12), and when suffixed immediately to an open verb stem. The latter only occurs in the preterit 3→2s of open stem transitive verbs, e.g. (59). Verbs without stem final consonants include verbs of conjugation vi-1 and vt-1 and all verbs of conjugations vi-2, vi-4, vt-6a and vt-6b.

(55) *Khanɔ·thǝ· lǝ· a-lɔ··-t-a-ø.*
well song MS-sing-NPT-23S-s23
You[s] sing well.

(56) *A-luph-ø-a!*
MS-catch-PT-s23
He caught you[s]!

(57) *A-bhi?i-pɔ bɨlɨ hitɨ a-mɨt-t-a?*
your-cow-GEN price how_much MS-do-NPT-s23
How do you want for your cow?

(58) *Tsəř-t-ə-ø mə·!.*
pay-NPT-1s-s23 EXC
I'll pay him!

(59) *Mɔ· a-be·-ø-ø?*
what MS-give-PT-s23
What did he give you?

§2.2.14. The second/third person dual morpheme

basic morph: <-*ši*>
label: d23

The second/third person dual morpheme <-*ši*> occupies the number slot, sf6. It signals duality of third person actant in forms with a third person patient, i.e. 1s→3d, 2s→3d and (3→3)^{d} forms, and duality of second or third person actant in 1s→2d and 23d→1s forms.

The d23 morpheme <-*ši*> is optionally copied in sf3 in 1s→2d forms. Forms in which the preceding 1s→2 morpheme <-*n*> is realized as its zero allomorph are, without this copying, homophonous with (3→3)^{d} forms:

(60) *Kaŋkɨ-bi na·m-ø-ši-šti.*
water-LOC dunk_underwater-1s→2-d23-d23(NPT)
I'll dunk you^{d} underwater.

(61) *Kaŋkɨ-bi na·m-ø-šti.*
water-LOC teach-1s→2-d23(NPT)
I'll dunk you^{d} underwater.

(62) *Ka?o-bi na·m-šti.*
river-LOC dunk_underwater-d23(NPT)
They'll^{d} dunk him underwater.

However, the optional copying of the d23 morpheme in sf3 is not restricted to forms in which the it could be construed as serving a disambiguating function, e.g. (15), (20), (25), (27) & (28).

The d23 morpheme <-*ši*> has a regular allomorph <-*š*> in 1s→3d and 23d→1s forms before the third first singular morpheme <-*ɨ*>, e.g. (33) & (42).

When the nonpreterit and d23 morphemes are immediately adjacent with no intervening morphemes between them, the nonpreterit suffix <-*t*> (§2.2.5) becomes fused into the d23 morpheme <-*šti*>, yielding <-*šti*>, e.g. (15), (20), (25), (27), (28), (60), (61) & (62).

§2.2.15. The second/third person plural morpheme

basic morph: <-*ini*>
label: p23

The second/third person plural morpheme is a number slot, sf6, filler which signals plurality of non-first person actant. In transitive verb forms, plurality of second and third person actant is indicated by the p23 morpheme <-*ini*>, i.e. in 1s→3p, 2s→3p, (3→3)P, 2p→3s, 1s→2p, 3→2p and 23p→1s forms, (1), (16), (18), (19), (21), (26).

In reflexive and intransitive forms, plurality of second person actant is expressed by the p23 morpheme <-*ini*>, (6), (49). Plurality of actant in 1p and 3p intransitive and reflexive forms is indicated by the 1p and 3sP morphemes, <-*k*> and <*ham*->, respectively (§2.2.3 & §2.1.1).

The p23 morpheme has a regular allomorph <-*ni*>:

1. after the reflexive morpheme <-*nši*>, e.g. (6),
2. after the zero allomorph of the 1s→2 *portemanteau* following a stem-final in /*l*/, /*ř*/, /*m*/ or /*ŋ*/ in lento speech (vide §2.2.2), e.g. (22), and
3. when attached immediately to an open verb stem, e.g. (63), and in the preterit 1s→2p forms of open stem verbs following the 1s→2 morpheme <-*n*>, e.g. (64). Verbs without stem final consonant include some verbs of conjugations vi-1 and vt-1 and all verbs of conjugations vi-2, vi-4, vt-6a and vt-6b. In verbs of conjugations vt-6a and vt-6b, the p23 morpheme <-*ni*> conditions lengthening of the preceding Σ_4 stem vowel, e.g. (65), but not of a preceding Σ_3 stem vowel, e.g. (66).

(63) *Intši-ʔa a·tš-ø-i-m khələ ŋə ŋyi·-ø-ni.*
we^{di}-ERG say-PT-d-NOM all EMPH hear-PT-p23
TheyP heard everything we^{di} said.

(64) *Šu-n-tu-n-ø-ni.*
deliver-1s→2-put-1s→2-PT-d23
I escorted youP [there].

(65) *Khələ a-řik-šɔ·-ø-ni me·!*
all MS-strew-dispatch-NPT-p23 EXC
YouP scattered it all [all over the place]!.

(66) *Ři·bha ři·p-ti-ø-ni.*
rope twine-put-PT-p23
TheyP braided up the rope.

The p23 morpheme in sf6 has a regular allomorph <-*n*> in 1s→3p and 23p→1s forms inbetween the third first singular morpheme <-*i*> in sf7 and the second first singular morpheme <-*ə*> or 1s→3/PT *portemanteau* <-*u*> in sf5, e.g. (34), (37), (39) & (40).

§2.2.16. The third first person singular morpheme

basic morph: <-*i*>
label: 1s

The third first singular morpheme occurs in its own functional position[7] in the suffixal string, sf7. It signals first person singular involvement in reflexive verb forms, e.g. (9) & (13), and also occurs as an automatic semantic copy of the second 1s morpheme <-*ə*> (§2.2.6) or 1s→3/PT *portemanteau* <-*u*> (§2.2.7) in 1s→3 and 23→1s after the d23 <-*š*> and p23 <-*n*> morphemes, e.g. (33), (34), (37), (39), (40) & (42).

§2.2.17. The negative morpheme

basic morph: <-*nə*>
label: NEG

The negative suffix <-*nə*> occurs as the last suffix in all negative simplex verb forms, e.g. (52) & (67). It is the filler of the negation slot, sf8. In preterit negative forms, it co-occurs with the preterit negative prefix <*mə*-> (§2.1.3), e.g. (3), (4) & (5).

(67) *Aŋki-ʔa tšaŋgiř-pɔ ši dzu-k-t-i-nə.*
wePe-ERG goat-GEN meat eat-1p-NPT-e-NEG
We don't eat goat meat.

§2.3. Overview of affixal slots and their fillers

Below the possible morpheme strings which occur in the simplicia of transitive, intransitive and reflexive verbs are illustrated. Morphemic analyses are provided of the simplex forms of the verbs *tɨlnɨ* vt-1 'raise (livestock, children)', *phɨknɨ* vi-1 'get up, rise' and *litnšinɨ* vr. 'turn over'.

Under each agreement heading, e.g. 1s→2s, the four morpheme analyses represent the nonpreterit, the nonpreterit negative, the preterit and the preterit negative simplex respectively. Parentheses in a morpheme gloss indicate an infixed morpheme. Parentheses around a morpheme indicate optionality.

Arrangement of Affixal Slots
and Their Fillers

pf1	pf2	Σ	sf1	sf2	sf3	sf4	sf5	sf6	sf7	sf8
ham	*mə*		*nši*	*k*	*ši*	*t*	*ə*	*i*	*ɨ*	*nə*
3pS	NEG		REF	1p	REF	NPT	1s	d	1s	NEG
a				*n*	*n*	*ø*	*u*	*a*		
MS				1s→2	1s→2	PT	1s→3/PT	s23		
				ŋ	*ši*		*i*	*ši*		
				1s	d23		i	d23		
					i		*ɨ*	*ini*		
					i		e	p23		
					ɨ		*a*			
					e		23S			
							ɨ			
							3sP/PT			

Possible Morpheme Strings: Transitive Paradigm

1s→2s

	Σ	1s→2		NPT	s23	
	t‡l	*l*		*t*	*a*	
	Σ	1s→2		NPT	s23	NEG
	t‡l	*l*		*t*	*‡*	*nə*
	Σ	1s→2	1s→2	PT	s23	
	t‡l	*l*	*n*	*ø*	*a*	
NEG	Σ	1s→2	1s→2	PT	s23	NEG
mə	*t‡l*	*l*	*n*	*ø*	*‡*	*nə*

1s→2d

	Σ	1s→2	d23		d23(NPT)	
	t‡l	*l*	*(ši)*		*šti*	
	Σ	1s→2	d23		d23(NPT)	NEG
	t‡l	*l*	*(ši)*		*šti*	*nə*
	Σ	1s→2	d23	PT	d23	
	t‡l	*l*	*(ši)*	*ø*	*ši*	
NEG	Σ	1s→2	d23	PT	d23	NEG
mə	*t‡l*	*l*	*(ši)*	*ø*	*ši*	*nə*

1s→2p

	Σ	1s→2		NPT	p23	
	t‡l	*l*		*t*	*ini*	
	Σ	1s→2		NPT	p23	NEG
	t‡l	*l*		*t*	*ini*	*nə*
	Σ	1s→2	1s→2	PT	p23	
	t‡l	*l*	*n*	*ø*	*ini*	
NEG	Σ	1s→2	1s→2	PT	p23	NEG
mə	*t‡l*	*l*	*n*	*ø*	*ini*	*nə*

1s→3s

	Σ	NPT	1s	s23		
	tɨl	*t*	*ə*	*ø*		
	Σ	NPT	1s	s23		NEG
	tɨl	*t*	*ə*	*ø*		*nə*
	Σ		1s→3/PT	s23		
	tɨl		*u*	*ø*		
NEG	Σ		1s→3/PT	s23		NEG
mə	*tɨl*		*u*	*ø*		*nə*

1s→3d

	Σ	NPT	1s	d23	1s	
	tɨl	*t*	*ə*	*š*	*ɨ*	
	Σ	NPT	1s	d23	1s	NEG
	tɨl	*t*	*ə*	*š*	*ɨ*	*nə*
	Σ		1s→3/PT	d23	1s	
	tɨl		*ɨ*	*š*	*ɨ*	
NEG	Σ		1s→3/PT	d23	1s	NEG
mə	*tɨl*		*ɨ*	*š*	*ɨ*	*nə*

1s→3p

	Σ	NPT	1s	p23	1s	
	tɨl	*t*	*ə*	*n*	*ɨ*	
	Σ	NPT	1s	p23	1s	NEG
	tɨl	*t*	*ə*	*n*	*ɨ*	*nə*
	Σ		1s→3/PT	p23	1s	
	tɨl		*ɨ*	*n*	*ɨ*	
NEG	Σ		1s→3/PT	p23	1s	NEG
mə	*tɨl*		*ɨ*	*n*	*ɨ*	*nə*

1di→3

	Σ		NPT	i	d	
	t±1		*t*	*i*	*ø*	
	Σ		NPT	i	d	NEG
	t±1		*t*	*i*	*ø*	*nə*
	Σ		PT	i	d	
	t±1		*ø*	*i*	*ø*	
NEG	Σ		PT	i	d	NEG
mə	*t±1*		*ø*	*i*	*ø*	*nə*

1de→23

	Σ		NPT	e	d	
	t±1		*t*	*±*	*ø*	
	Σ		NPT	e	d	NEG
	t±1		*t*	*±*	*ø*	*nə*
	Σ		PT	e	d	
	t±1		*ø*	*±*	*ø*	
NEG	Σ		PT	e	d	NEG
mə	*t±1*		*ø*	*±*	*ø*	*nə*

1pi→3

	Σ	1p	i	NPT	i		
	t±1	*k*	*i*	*t*	*i*		
	Σ	1p	i	NPT	i		NEG
	t±1	*k*	*i*	*t*	*i*		*nə*
	Σ	1p		PT	i		
	t±1	*k*		*ø*	*i*		
NEG	Σ	1p		PT	i		NEG
mə	*t±1*	*k*		*ø*	*i*		*nə*

1pe→23

		Σ	1p	e	NPT	e		
		tɨl	*k*	*ɨ*	*t*	*a*		
		Σ	1p	e	NPT	e		NEG
		tɨl	*k*	*ɨ*	*t*	*ɨ*		*nə*
		Σ	1p		PT	e		
		tɨl	*k*		*ø*	*a*		
	NEG	Σ	1p		PT	e		NEG
	mə	*tɨl*	*k*		*ø*	*ɨ*		*nə*

2s→3s

MS		Σ			NPT		s23	
a		*tɨl*			*t*		*a*	
MS		Σ			NPT		s23	NEG
a		*tɨl*			*t*		*ɨ*	*nə*
MS		Σ				3sP/PT		
a		*tɨl*				*ɨ*		
MS	NEG	Σ				3sP/PT		NEG
a	*ø*	*tɨl*				*ɨ*		*nə*

2s→3d

MS		Σ					d23(NPT)	
a		*tɨl*					*šti*	
MS		Σ					d23(NPT)	NEG
a		*tɨl*					*šti*	*nə*
MS		Σ			PT		d23	
a		*tɨl*			*ø*		*ši*	
MS	NEG	Σ			PT		d23	NEG
a	*ø*	*tɨl*			*ø*		*ši*	*nə*

2s→3p

MS		Σ	NPT	p23	
a		*tɨl*	*t*	*ini*	
MS		Σ	NPT	p23	NEG
a		*tɨl*	*t*	*ini*	*nə*
MS		Σ	PT	p23	
a		*tɨl*	*ø*	*ini*	
MS	NEG	Σ	PT	p23	NEG
a	*ø*	*tɨl*	*ø*	*ini*	*nə*

3→2s

MS		Σ	NPT	s23	
a		*tɨl*	*t*	*a*	
MS		Σ	NPT	s23	NEG
a		*tɨl*	*t*	*ɨ*	*nə*
MS		Σ	PT	s23	
a		*tɨl*	*ø*	*a*	
MS	NEG	Σ	PT	s23	NEG
a	*ø*	*tɨl*	*ø*	*ɨ*	*nə*

2d→3s, 3→2d

MS		Σ	NPT	d	
a		*tɨl*	*t*	*i*	
MS		Σ	NPT	d	NEG
a		*tɨl*	*t*	*i*	*nə*
MS		Σ	PT	d	
a		*tɨl*	*ø*	*i*	
MS	NEG	Σ	PT	d	NEG
a	*ø*	*tɨl*	*ø*	*i*	*nə*

2p→3s, 3→2p

MS		Σ	NPT	p23	
a		*tɨl*	*t*	*ini*	
MS		Σ	NPT	p23	NEG
a		*tɨl*	*t*	*ini*	*nə*
MS		Σ	PT	p23	
a		*tɨl*	*ø*	*ini*	
MS	NEG	Σ	PT	p23	NEG
a	*ø*	*tɨl*	*ø*	*ini*	*nə*

3s→3s

		Σ	NPT	s23	
		tɨl	*t*	*a*	
		Σ	NPT	s23	NEG
		tɨl	*t*	*ɨ*	*nə*
		Σ	3sP/PT		
		tɨl	*ɨ*		
	NEG	Σ	3sP/PT		NEG
	mə	*tɨl*	*ɨ*		*nə*

(3→3)[d]

		Σ		d23(NPT)	
		tɨl		*šti*	
		Σ		d23(NPT)	NEG
		tɨl		*šti*	*nə*
		Σ	PT	d23	
		tɨl	*ø*	*ši*	
	NEG	Σ	PT	d23	NEG
	mə	*tɨl*	*ø*	*ši*	*nə*

(3→3) P

Σ	NPT	p23		
tɨl	*t*	*ini*		
Σ	NPT	p23	NEG	
tɨl	*t*	*ini*	*nə*	
Σ	PT	p23		
tɨl	*ø*	*ini*		
NEG Σ	PT	p23	NEG	
mə tɨl	*ø*	*ini*	*nə*	

23s→1s

MS Σ	NPT	1s	s23			
a tɨl	*t*	*ə*	*ø*			
MS Σ	NPT	1s	s23	NEG		
a tɨl	*t*	*ə*	*ø*	*nə*		
MS Σ	PT	1s	s23			
a tɨl	*ø*	*ə*	*ø*			
MS NEG Σ	PT	1s	s23	NEG		
a ø tɨl	*ø*	*ə*	*ø*	*nə*		

23d→1s

MS Σ	NPT	1s	d23	1s		
a tɨl	*t*	*ə*	*š*	*ɨ*		
MS Σ	NPT	1s	d23	1s	NEG	
a tɨl	*t*	*ə*	*š*	*ɨ*	*nə*	
MS Σ	PT	1s	d23	1s		
a tɨl	*ø*	*ə*	*š*	*ɨ*		
MS NEG Σ	PT	1s	d23	1s	NEG	
a ø tɨl	*ø*	*ə*	*š*	*ɨ*	*nə*	

23p→1s

MS	Σ	NPT	1s	p23	1s	
a	*tɨl*	*t*	*ə*	*n*	*ɨ*	
MS	Σ	NPT	1s	p23	1s	NEG
a	*tɨl*	*t*	*ə*	*n*	*ɨ*	*nə*
MS	Σ	PT	1s	p23	1s	
a	*tɨl*	*ø*	*ə*	*n*	*ɨ*	
MS NEG	Σ	PT	1s	p23	1s	NEG
a *ø*	*tɨl*	*ø*	*ə*	*n*	*ɨ*	*nə*

3→1di

MS	Σ	NPT	i	d	
a	*tɨl*	*t*	*i*	*ø*	
MS	Σ	NPT	i	d	NEG
a	*tɨl*	*t*	*i*	*ø*	*nə*
MS	Σ	PT	i	d	
a	*tɨl*	*ø*	*i*	*ø*	
MS NEG	Σ	PT	i	d	NEG
a *ø*	*tɨl*	*ø*	*i*	*ø*	*mə*

23→1de

MS	Σ	NPT	e	d	
a	*tɨl*	*t*	*ɨ*	*ø*	
MS	Σ	NPT	e	d	NEG
a	*tɨl*	*t*	*ɨ*	*ø*	*nə*
MS	Σ	PT	e	d	
a	*tɨl*	*ø*	*ɨ*	*ø*	
MS NEG	Σ	PT	e	d	NEG
a *ø*	*tɨl*	*ø*	*ɨ*	*ø*	*nə*

3→1pi

MS		Σ	1p	i	NPT	i	
a		*tɨl*	*k*	*i*	*t*	*i*	
MS		Σ	1p	i	NPT	i	NEG
a		*tɨl*	*k*	*i*	*t*	*i*	*nə*
MS		Σ	1p		PT	i	
a		*tɨl*	*k*		*ø*	*i*	
MS	NEG	Σ	1p		PT	i	NEG
a	*ø*	*tɨl*	*k*		*ø*	*i*	*nə*

23→1pe

MS		Σ	1p	e	NPT	e	
a		*tɨl*	*k*	*ɨ*	*t*	*a*	
MS		Σ	1p	e	NPT	e	NEG
a		*tɨl*	*k*	*ɨ*	*t*	*ɨ*	*nə*
MS		Σ	1p		PT	e	
a		*tɨl*	*k*		*ø*	*a*	
MS	NEG	Σ	1p		PT	e	NEG
a	*ø*	*tɨl*	*k*		*ø*	*ɨ*	*nə*

Possible Morpheme Strings: Intransitive Paradigm

1s

	Σ	NPT	1s		
	phɨk	*t*	*ə*		
	Σ	NPT	1s		NEG
	phɨk	*t*	*ə*		*nə*
	Σ	PT	1s		
	phɨkh	*ø*	*ə*		
NEG	Σ	PT	1s		NEG
mə	*phɨkh*	*ø*	*ə*		*nə*

1di

	Σ	NPT	i	d	
	phɨk	*t*	*i*	*ø*	
	Σ	NPT	i	d	NEG
	phɨk	*t*	*i*	*ø*	*nə*
	Σ	PT	i	d	
	phɨkh	*ø*	*i*	*ø*	
NEG	Σ	PT	i	d	NEG
mə	*phɨkh*	*ø*	*i*	*ø*	*nə*

1de

	Σ	NPT	e	d	
	phɨk	*t*	*ɨ*	*ø*	
	Σ	NPT	e	d	NEG
	phɨk	*t*	*ɨ*	*ø*	*nə*
	Σ	PT	e	d	
	phɨkh	*ø*	*ɨ*	*ø*	
NEG	Σ	PT	e	d	NEG
mə	*phɨkh*	*ø*	*ɨ*	*ø*	*nə*

1pi

		Σ	1p	i	NPT	i		
		phɨk	*k*	*i*	*t*	*i*		
		Σ	1p	i	NPT	i		NEG
		phɨk	*k*	*i*	*t*	*i*		*nə*
		Σ	1p		PT	i		
		phɨk	*k*		*ø*	*i*		
	NEG	Σ	1p		PT	i		NEG
	mə	*phɨk*	*k*		*ø*	*i*		*nə*

1pe

		Σ	1p	e	NPT	e		
		phɨk	*k*	*ɨ*	*t*	*a*		
		Σ	1p	e	NPT	e		NEG
		phɨk	*k*	*ɨ*	*t*	*ɨ*		*nə*
		Σ	1p		PT	e		
		phɨk	*k*		*ø*	*a*		
	NEG	Σ	1p		PT	e		NEG
	mə	*phɨk*	*k*		*ø*	*ɨ*		*nə*

2s

MS		Σ		NPT	23S	s23	
a		*phɨk*		*t*	*a*	*ø*	
MS		Σ		NPT	23S	s23	NEG
a		*phɨk*		*t*	*ɨ*	*ø*	*nə*
MS		Σ		PT	23S	s23	
a		*phɨkh*		*ø*	*a*	*ø*	
MS	NEG	Σ		PT	23S	s23	NEG
a	*ø*	*phɨkh*		*ø*	*ɨ*	*ø*	*nə*

2d

MS		Σ	NPT	23S	d	
a		*phɨk*	*t*	*ø*	*i*	
MS		Σ	NPT	23S	d	NEG
a		*phɨk*	*t*	*ø*	*i*	*nə*
MS		Σ	PT	23S	d	
a		*phɨkh*	*ø*	*ø*	*i*	
MS	NEG	Σ	PT	23S	d	NEG
a	*ø*	*phɨkh*	*ø*	*ø*	*i*	*nə*

2p

MS		Σ	NPT	23S	p23	
a		*phɨk*	*t*	*ø*	*ini*	
MS		Σ	NPT	23S	p23	NEG
a		*phɨk*	*t*	*ø*	*ini*	*nə*
MS		Σ	PT	23S	p23	
a		*phɨkh*	*ø*	*ø*	*ini*	
MS	NEG	Σ	PT	23S	p23	NEG
a	*ø*	*phɨkh*	*ø*	*ø*	*ini*	*nə*

3s

		Σ	NPT	23S	s23	
		phɨk	*t*	*a*	*ø*	
		Σ	NPT	23S	s23	NEG
		phɨk	*t*	*ɨ*	*ø*	*nə*
		Σ	PT	23S	s23	
		phɨkh	*ø*	*a*	*ø*	
	NEG	Σ	PT	23S	s23	NEG
	mə	*phɨkh*	*ø*	*ɨ*	*ø*	*nə*

3d

		Σ	NPT	23S	d		
		phɨk	*t*	*ø*	*i*		
		Σ	NPT	23S	d		NEG
		phɨk	*t*	*ø*	*i*		*nə*
		Σ	PT	23S	d		
		phɨkh	*ø*	*ø*	*i*		
	NEG	Σ	PT	23S	d		NEG
	mə	*phɨkh*	*ø*	*ø*	*i*		*nə*

3p

3pS		Σ	NPT	23S			
ham		*phɨk*	*t*	*a*			
3pS		Σ	NPT	23S			NEG
ham		*phɨk*	*t*	*ɨ*			*nə*
3pS		Σ	PT	23S			
ham		*phɨkh*	*ø*	*a*			
3pS	NEG	Σ	PT	23S			NEG
ham	*mə*	*phɨkh*	*ø*	*ɨ*			*nə*

Possible Morpheme Strings: Reflexive Paradigm

1s/REF

	Σ	REF(NPT)				1s	
	lit	*nšt*				*i*	
	Σ	REF(NPT)				1s	NEG
	lit	*nšt*				*i*	*nə*
	Σ	REF	PT			1s	
	lit	*nš*	*ø*			*i*	
NEG	Σ	REF	PT			1s	NEG
mə	*lit*	*nš*	*ø*			*i*	*nə*

1d/REF

	Σ	REF	REF(NPT)		i	d	
	lit	*nši*	*št*		*i*	*ø*	
	Σ	REF	REF(NPT)		i	d	NEG
	lit	*nši*	*št*		*i*	*ø*	*nə*
	Σ	REF	REF	PT	i	d	
	lit	*nši*	*š*	*ø*	*i*	*ø*	
NEG	Σ	REF	REF	PT	i	d	NEG
mə	*lit*	*nši*	*š*	*ø*	*i*	*ø*	*nə*

1de/REF

	Σ	REF	REF(NPT)		e	d	
	lit	*nši*	*št*		*i*	*ø*	
	Σ	REF	REF(NPT)		e	d	NEG
	lit	*nši*	*št*		*i*	*ø*	*nə*
	Σ	REF	REF	PT	e	d	
	lit	*nši*	*š*	*ø*	*i*	*ø*	
NEG	Σ	REF	REF	PT	e	d	NEG
mə	*lit*	*nši*	*š*	*ø*	*i*	*ø*	*nə*

1pi/REF

		Σ	REF	1p	NPT	i	
		lit	*nši*	*k*	*t*	*i*	
		Σ	REF	1p	NPT	i	NEG
		lit	*nši*	*k*	*t*	*i*	*nə*
		Σ	REF	1p	PT	i	
		lit	*nši*	*k*	*ø*	*i*	
	NEG	Σ	REF	1p	PT	i	NEG
	mə	*lit*	*nši*	*k*	*ø*	*i*	*nə*

1pe/REF

		Σ	REF	1p	NPT	e	
		lit	*nši*	*k*	*t*	*a*	
		Σ	REF	1p	NPT	e	NEG
		lit	*nši*	*k*	*t*	*i*	*nə*
		Σ	REF	1p	PT	e	
		lit	*nši*	*k*	*ø*	*a*	
	NEG	Σ	REF	1p	PT	e	NEG
	mə	*lit*	*nši*	*k*	*ø*	*i*	*nə*

2s/REF

MS		Σ	REF(NPT)		s23	
a		*lit*	*nšti*		*ø*	
MS		Σ	REF(NPT)		s23	NEG
a		*lit*	*nšti*		*ø*	*nə*
MS		Σ	REF	PT	s23	
a		*lit*	*nši*	*ø*	*ø*	
MS	NEG	Σ	REF	PT	s23	NEG
a	*ø*	*lit*	*nši*	*ø*	*ø*	*nə*

2d/REF

MS	Σ	REF	REF(NPT)		d	
a	*lit*	*nši*	*št*		*i*	
MS	Σ	REF	REF(NPT)		d	NEG
a	*lit*	*nši*	*št*		*i*	*nə*
MS	Σ	REF	REF	PT	d	
a	*lit*	*nši*	*š*	*ø*	*i*	
MS NEG	Σ	REF	REF	PT	d	NEG
a *ø*	*lit*	*nši*	*š*	*ø*	*i*	*nə*

2p/REF

MS	Σ	REF	REF(NPT)		p23	
a	*lit*	*nši*	*št*		*ini*	
MS	Σ	REF	REF(NPT)		p23	NEG
a	*lit*	*nši*	*št*		*ini*	*nə*
MS	Σ	REF	REF	PT	p23	
a	*lit*	*nši*	*ši*	*ø*	*ni*	
MS NEG	Σ	REF	REF	PT	p23	NEG
a *ø*	*lit*	*nši*	*ši*	*ø*	*ni*	*nə*

3s/REF

	Σ	REF(NPT)		s23	
	lit	*nšti*		*ø*	
	Σ	REF(NPT)		s23	NEG
	lit	*nšti*		*ø*	*nə*
	Σ	REF	PT	s23	
	lit	*nši*	*ø*	*ø*	
NEG	Σ	REF	PT	s23	NEG
mə	*lit*	*nši*	*ø*	*ø*	*nə*

3d/REF

		Σ	REF	REF(NPT)		d	
		lit	*nši*	*št*		*i*	
		Σ	REF	REF(NPT)		d	NEG
		lit	*nši*	*št*		*i*	*nə*
		Σ	REF	REF	PT	d	
		lit	*nši*	*š*	*ø*	*i*	
	NEG	Σ	REF	REF	PT	d	NEG
	mə	*lit*	*nši*	*š*	*ø*	*i*	*nə*

3p/REF

3pS		Σ	REF(NPT)				
ham		*lit*	*nšti*				
3pS		Σ	REF(NPT)				NEG
ham		*lit*	*nšti*				*nə*
3pS		Σ	REF		PT		
ham		*lit*	*nši*		*ø*		
3pS	NEG	Σ	REF		PT		NEG
ham	*mə*	*lit*	*nši*		*ø*		*nə*

NOTES

[1] The phoneme /ɨ/ is a mid back unrounded vowel pronounced as ы in Russian бык 'bull' or рыба 'fish'.

[2] The phoneme /ʔ/ is characterized by a highly energetic glottal closure with release followed by a just audible staccato echo of the preceding vowel.

[3] of non-humans.

[4] The verb *a·tnɨ* 'to say' is anomalous in that it is conjugated as an intransitive verb but takes the subject in the ergative case.

[5] The fact that the copied morpheme <-*ši*> occurs in first dual and second plural forms mitigates against analysing it as the second/third person dual morpheme <-*ši*>. Furthermore, the d23 morpheme <-*ši*> is not attested in intransitive forms, and the d23 morpheme only occurs in sf3 as a copy when it is also overtly realized in sf6, which is not the case in any reflexive form.

An alternative analysis for the sf3 <-*ši*> in reflexive forms is as a generalized dual suffix, i.e. a non-singular number suffix derived from an original dual suffix, restricted to the reflexive. Its non-occurrence in first plural and third plural forms could be motivated by the occurrence of the first plural and third plural subject morphemes, <-*k*> and <*ham*-> in these forms, although this would leave its co-occurrence with the p23 morpheme <-*ini*> in second plural reflexive forms unmotivated. This alternative analysis necessitates distinguishing another functional position in the suffixal string or ascribing a dual function to suffixal slot 3.

[6] The 1s→2 morpheme <-*n*> never co-occurs with either the 1p morpheme <-*k*> or the reflexive morpheme <-*ši*>, and is always suffixed directly to the verb stem. Whether the 1s→2 morpheme is a sf1 or a sf2 filler must therefore be determined on other grounds. There are two independent criteria for analysing the 1s→2 morpheme <-*n*> as a sf2 filler.

The first is semantic: On the basis of the shared semantic component of first person involvement, I have analysed it as occupying the same functional position in the suffixal string as the first plural morpheme <-*k*> and the first first singular morpheme <-*ŋ*>, i.e. sf2. When Dumi Rai affixes are compared with the verbal affixes of Limbu, we find that the Dumi 1s→2 morpheme <-*n*> appears to be cognate to the Limbu 1→2 suffix <-*nɛ*>, and that the Dumi reflexive suffix <-*nši*> appears to correspond to the Limbu reflexive/reciprocal suffix

<-*siŋ*, -*nɛ*> (Van Driem 1987: 75, 86-89). In my morphological analysis of Limbu simplicia, the 1→2 and REF suffixes both occur in the same functional position in the suffixal string, viz. the first suffixal slot immediately following the verb stem and preceding the tense marker. However, Limbu is not Dumi Rai.

The second criterion is distributional. The three morphemes which are analysed here as sf2 fillers show the same distribution as infixes in the aspectivized compounds of open stem verbs (vide §2.2.4).

[7] The third 1s morpheme <-*i*> could be analysed as the exclusive morpheme <-*i*>. The alternative analysis would be: Suffixal slot 7 is the exclusivity/inclusivity slot, and the inclusive and exclusive morphemes, <-*i*> and <-*i*>, occur in this functional position. As in Limbu (Van Driem 1987: 102-103, 368), the paenultimate functional position in a Dumi Rai simplex is the exclusivity/inclusivity slot. The notion exclusive in the 1s forms denotes, as elsewhere, 'exclusive of speaker' (cf. the discussion on exclusivity in Van Driem 1987: 29). The occurrence of the exclusive morpheme <-*i*> in 1s forms is triggered by occurrence of the d23, p23 or REF morpheme in the same suffixal string. The second 1s morpheme <-*ə*> elides before exclusive <-*i*> in 1s reflexive forms.

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