1. Phonology. The language discussed here is that of the principal groups who live in Rovori province of Kavatu, and its sound system (underlying phonemes) is as follows:

Consonants:
p	t	k
b	d	g
m	n	ŋ
l	j	
s z		h

Vowels: i e a u o

These symbols have their customary IPA values. Hereafter, however, /j/]] is written "y".

Word forms that occur underlyingly are: V, VC, CV, (rare (C)VV(C)), CVC, (C)VCV, (C)VCVC; underlying stress falls on the first syllable of the bisyllabic forms (C)VCV and (C)VCVC. All V can occur in the monosyllables and in the stressed syllable of bisyllabic forms, but only /i a u/ may occur in the second, unstressed syllable. All C (or none) can occur in initial and medial position in all forms, and all C *except* /y h/ may occur in final position. (NB also, underlying sequences of /y/ and /i/ do not co-occur in either order, though they may co-occur across a morpheme boundary in some derived forms.) In final syl.–CVC, certain sequences of C (especially identical C) are rare or are not permitted In the rare CVV(C) forms, not all vowel sequences occur, as will be seen below. There are no CVCVC forms with all 3 C identical.

There are quite a few exceptional word-forms-- loans and compounds (often old/fixed, and not always transparent)-- that have CC clusters in initial or medial position (the language name itself, Prevli, is one such example), or final-syllable stress; many of these forms are invariant-- i.e do not undergo the metatheses that are mentioned below-- and may also violate rules of vowel occurrence or vowel harmony. The underlying forms of the subject+object pronouns also have CC clusters in final position but in such cases there is always a "hidden" final vowel that can re-appear in order to avoid, for example, a 3 or 4 C-cluster across a morpheme boundary; this is the case, also, with the monosyllabic and -VV- forms with final C. This is true also of undelying /CVC/ forms with "hidden" final /a/-- it is invariant and does not undergo mutation when it is needed in final position. Thus the surface form of /ped(a)/ *per(a)* will be distinct from that of /peda/ *pere*.

Most importantly, morphophonemic processes cause many V and C to undergo mutations, producing a great deal of allophony-- with the result that surface forms of a given word are often quite different from the underlying form.

--First, there are rules of vowel-harmony that affect the unstressed final-syl. V of CVCVC, and CVCV forms, and vowels in the rare -VV- sequences-- the rules are different in each case, and the changes are discussed below and summarized in TABLES 1.A,B,C.

--Second, underlying final stops mutate (undergo lenition) in surface forms, as follows: /p t k/ > voiced [b d g], while final and *medial* /b d g/ > lenited [β r γ]. The other finals-- nasals and /l s z/-- do not mutate. Some exs.: /sátap/ sátab, /sápat/ sápad, /sádab/ sárav, /ságad/ saγar etc. However, this form of the word is rather rare, because--

--Third, all /(C)VCVC/ forms undergo metathesis of the final -VC to create the surface forms of nouns and *realis* verbs-- that is, $C_1V_1C_2V_2C_3 > C_1V_1C_2C_3V_2$ -- and the resulting CC clusters frequently undergo further phonetic modification-- e.g. /sámat, sámta/ > sápta; /sálaŋ, sálŋa/ > sálga etc. The unmetathesized forms (e.g. samad, salaŋ) do have a function, but are infrequently used. Further discussion of this phenomenon is given below and their functions in the grammar will be discussed in the relevant sections.

--Fourth, three further morphophonemic processes that affect the outcome are:

(a) initial CV-metathesis with stress-shift and frequent allophonic changes in the C-clusters e.g. /sapat,aspát/ >aśpát [ašpát])-- this process forms the *irrealis* of verbs. Perhaps (historically) because of the stress patterns, the clusters resulting from this metathesis are not always the same as those produced by final -VC metathesis.

(b) i-infixation, which forms the *passive voice* of verbs and results in changes to both the initial C and the stressed V (e.g. /s-i-apat/ > siapta > [ˈšæpta] written here "śäpta"), and--

(c) initial-C reduplication (e.g. /t-tápat/ > tsápad, tsápta-- generally forming abstract nouns from verbs

--Finally, initial-syllable reduplication-- it has no effect, e.g. /ta-tápat/ tatapad ~ tatapta--this forms, inter alia, the intensive and "surprise" forms of verbs and some nouns.

All these processes, which can affect almost all forms, are further detailed below, see TABLES 2, 3 and 4, and their function in the grammar will be discussed in later sections.

The underlying forms CVV(C), (C)VCV, and (C)VCVC have stress on the initial (penultimate) V, and that is true of most surface forms too; stress will not be indicated in such cases. But some derivatives, compounds and irregular forms have final stress, and that stress will be indicated here with the acute accent mark.

1.1. VOWEL HARMONY. As mentioned above, underlying nominal and verbal /CVCVC/ forms usually have surface realizations as metathesized CVCCV or (less common) plain CVCVC--these are the basic surface forms of most nouns and realis verbs.. Stress falls on the penult vowel, which may be any of /i e a u o/. The unstressed ultima vowels (only /i a u/) mutate (harmonize) as follows:

1a. Rounding+height harmony: following ú, i > ü; and following ó, i > ö
1b. Fronting+height harmony: following í, u > ü; and following é, u > ö
2. Front/back(+rounding) harmony: following í or é, a > ä; following ú or ó, a > å
3. Height harmony: following á, i > e and u > o

When both vowels match as to frontness (í-i, é-i), back/round (/ú-u, ó-u) or low (á-a), there are no changes (unless the medial C is /y/-- more on this later §....).

Phonetically, ü is [y ~ Y], ö is [ø ~ œ], the high and mid front rounded vowels familiar to speakers of French and German--the higher variants are heard in open syllables, the lower in closed syllables (e.g. /supit/ supüd ['supYd] ~suptü ['supty]--although it is not a hard-and-fast rule; ä is [æ] and å is [ɔ], low-front and low-back rounded respectively, as in Amer.English (Midwestern) "ash" and "law". These mutated vowels are seen in both full CVCV̱C and metathesized CVCCV̱ forms. NB however, there are forms (mostly personal names, old compounds, loans) that do not obey the harmonization rules-- in these, mutated vowels may occur in the stressed penult (as *tämni, lüsi* (pers. names), or *süngil* 'someone else', a compound) or may fail to occur where expected, as *orvori* 'name of the province, < Kash *rovori'*-- or that violate vowel-occurrence rules, i.e. these forms may have *e,o* in the ultima, e.g. *kaśék* 'movie' < Kash *kaçeke*.

There are dialects where *ü* has shifted to [i] or [ɨ], and some of the [i] forms have been borrowed into the "standard" dialect discussed here. The same dialects also pronounce *ö* as unround/central [ɜ], but speakers of the standard apparently overlook that change.

These changes are summarized in the following table:
TABLE 1A. UNSTRESSED V IN FINAL CLOSED SYLLABLE #(C)[V+str]C[iua]C#

final /i/	final /u/	final /a/
í + i > í--i	í + u > í--ü	í + a > í--ä
é + i > é--i	é + u > é--ö	é + a > é--ä
ú + i > ú--ü	ú + u > ú--u	ú + a > ú--å
ó + i > ó--ö	ó + u > ó--u	ó + a > ó--å
á + i > á--e	á + u > á--o	á + a > á--a

XX.2. Harmonization in /CVCV/ forms. In this case the unstressed [i a u] of the final open syllable undergo only *height* harmonization, if the stressed vowel differs as to front/backness, or is /á/. Thus there is no change if both vowels are (a) front (í-i or é-i) or (b) back-round (ú-u or ó-u), (c) high (í-u or ú-i) or (d) low (á-a). Thus--

  1. following é or á, u > o; following ó or á, i > e, and
  2. following í or é, a > e; following ú or ó, a > o

Again, there are loans, compounds, etc. where these changes are not seen. The following table gives a summary:
TABLE 1B. FINAL OPEN SYLLABLE #(C)[V+str]C[iua]#

/V--i/	/V+u/	/V+a/
í--i	í--u	í--e

é--i	é--o	é--e
ú--i	ú--u	ú--o
ó--e	ó--u	ó--o
á--e	á--o	á--a

1.2. CHANGES TO VOWEL SEQUENCES #C[V+str][V-str](C)#

1.2. CHANGES TO VOWEL SEQUENCES #C[V+str][V-str](C)# -- note that only underlying sequences high+low, low+high and mid+high/low occur (neither same-height nor identical sequences occur underlyingly). (A mere handful of forms have no initial C.) If the form has no final C, the unstressed ultima V mutates; if there is a final C, however, it is the *stressed penult* V that is affected.

Mutations in CVV forms are similar to those of CVCV, with some additions; those seen in CVVC forms somewhat resemble those seen in CVCVC, but in reverse. Both CVV and CVVC forms are rather rare, though some play important roles in the grammar. (It should be noted that CVVC forms do not undergo final -VC metathesis.)

These changes are summarized in the following table:
TABLE 1C. VOWEL SEQUENCES #C[V+str]V(C)#

In CV$_1$V$_2$ -- V$_2$ mutates:	In CV$_1$V$_2$C -- V$_1$ mutates:
ía > íe [ije] *	ía > éa
úa > úo [uwo] *	úa > óa
ái > áe ~[aʔe]**	ái > äi
áu> áo ~[áʔo]**	áu > åu
éi > e: (written ee [eʔe]**)	id. (usu. [e:] or [eⁱ])
éu > éo [ejo] *	éu > öu
ói > oe [owe] *	ói > öi ***
óu> o: (written oo [oʔo]**)	id. (usu. [o:] or [oᵘ])
éa > ä: ([æə] written ê)	id.
óa > å: ([ɔə] written ô)	id.

Notes: * The intervocalic glides [j, w] are pronounced very weakly.

  ** In CVV forms, pronunciation of long [ee, oo, ao, ae] with intervening [ʔ]-- [eʔe, aʔe, oʔo, aʔo]-- is optional but most common, but not in CVVC# forms-- thus a form like /meik/ would simply be [me:k ~meⁱk]. The long vowels ê and ô become short-- either [e,o] or [æ,ɔ] ä,å (there is no fixed rule, unfortunately)-- if an affix adds another syllable to the word: bôr 'ought to, should' > uZvor 'shouldn't...', bork(a) 'I ought to...', but nên 'mother' > näŋka 'my mother'.

  *** Some speakers carry the rounding over to the *i*, resulting in [œy].

1.3. VOWEL CHANGES WITH PASSIVE INFIX/PREFIX /i/. (/i/ is infixed between the initial C and penult V of realis forms (the initial C is also palatalized, of which more later <mark>§.....</mark>), but a prefix (written *y*-) to all forms with initial V (some realis, and all causative and irrealis forms.) Its effect is to front following back/round vowels /u,o/, and /a/, and to lengthen front vowels /i,e/. Thus after *-i-* ~ *y*-, /u,o/ > ü,ö resp. and /a/ > ä; /i,e/ > i: and e:-- this e: is pronounced [e^i], unlike *ee* < the sequence /ei#/. In realis forms, the mutated ultima V is unaffected-- e.g. /madin/ *maren*, realis *marne* 'look at, watch', passive /m-i-adin/ *m,ärne* ['mjærne] 'be watched'.

(Underlying initial or medial /y/ has similar effects when it is involved in metathesis; see <mark>§....</mark>)

1.4. INITIAL CV- METATHESIS, i.e. /CVCVC/ > VCCVC: This process creates the regular *irrealis* forms of verbs, also--though rare, lexically conditioned and irregular--variant or combining forms of some non-verbals. Irrealis verb forms also shift the stress to the ultima, and vowel harmony is thereby blocked. The irregular noun forms generally retain penultimate stress, and vowel harmony may or may not be seen-- it is likely these are old, somewhat stereotyped forms, or dialect borrowings. In both cases, however, if the original initial C was /y/ or /h/, there will be changes to the original following V. These changes will be discussed below when we deal more fully with initial CV- metathesis.

1.6. CONSONANTAL ALLOPHONY. We have already mentioned the lenition of final voiceless stops > voiced in absolute final position; and of voiced stops > fricatives in both final and medial positon.

When /CVCVC/ forms undergo either final -VC or initial CV- metathesis, additional allophony occurs in the resulting 2-consonant clusters,but the changes are not identical and often idiosyncratic, probably (historically) because in CVCCV forms the cluster is in post-tonic position, while in VCCVC forms, it is pre-tonic.

1.7. FINAL -VC METATHESIS $(C_1)V_1C_2V_2C_3 > (C_1)V_1C_2C_3V_2$) is very common, and forms the realis of verbs, and surface form of nouns; note that presence/absence of an initial C is irrelevant.) It seems simplest to put these changes in tabular form, with commentary following. Note that all C may occur medially; all except /y h/ finally. Items in ( ) are rare; **XX** means "does not occur". Two entries in a cell indicate that there is some free variation in usage.

TABLE 2: PHONETIC CHANGES WITH FINAL-VC METATHESIS (Finals C_3 in the top row across, medials C_2 in the down column)

$C_3 \rightarrow$	/p/	/t/	/k/	/b/	/d/	/g/	m	n	ŋ	l	s	z
$C_2\downarrow$ 1.p	(pf)	pt	pk	**XX**	pr	ph	pm	pn	pk	pl	ps	bz
2.t	tp	(ts)	tk	tv	tr	th	tm	tn	tk	tl	ts	dz

3.k	kp	kt	(k:)	kv	kr	kh	km	kn	(ŋ:)	kl	ks	gz
4.b	(fp)	ft	fk	(v:)	vr	vG	vm	vn	vŋ~vg	vl	fs	vz
5.d	rp	rt	rk	rv	**XX**	rG ~rg	rm	rn	rŋ	dl	rs	rz
6.g	gb	gd	(g:)	Gv	Gr	**XX**	Gm	Gn	**XX**	Gl	Gz	z:
7.m	mp	pt	pk	mb	bd	bg	(m:)	mn	mg~bg	bl	ps	bz
8.n	mp	nt	ŋk	dv~nv	nd	dg~ŋg	mn	(nd ~n:)	ŋk	dl	ts	nz
9.ŋ	kp	kt	ŋg	gv~ŋv	gr	ŋg	gm	gn	(ŋ:)	gl	ks	gz
10.l	lp	lt	lk	lv	ld	lG	lm	ln	lg	dl	ls	lz
11.s	śp	śt	śk	śf	śr	śx	śm	śn	Zg	śl	ś	Z:
12.z	zb	zd	zg	zv	zr	zG~ZG	zm	zn	zŋ	zl	z:	(dz)
13.Vh	V:p	V:t	V:k	V:f	V:hr	V:h	V:m	V:n	V:ŋ	V:hl	V:ś	V:s
14.Vy	Vb,	Vd,	Vg,	Vv,	Vr,	Vg,	Vm,	Vn,	Vŋ,	Vl,	Vś	VZ

Comments:
(a) Rows 1,2,3 Medial voiceless stop + C: The medial remains voiceless, except before /z/; voiced final stops are lenited, but /g/ G [γ] is devoiced > [h] and resulting *ph, th, kh* are pronounced with strong aspiration and noticable fricative release, more or less [pᶠʰ, tᶿʰ, kˣʰ]. Final /ŋ/, no doubt via a [g] stage, devoices > [k] following p- and t-; clusters of *k+g/ŋ*, rare in any case, behave distinctively (as do /g,ŋ/ in many combinations). In some non-prestige dialects, the *k* in *pk, tk, kk* has shifted to /ʔ/, resulting in ejectives [p' t' k'], written (when necessary) *pʔ, tʔ, kʔ*.
(b) Rows 4,5, medial /b,d/ + C: They are lenited as usual, and remain so, with *v* devoicing > f before voiceless stops and /s/, *r* reverting to a stop preceding /l/. Speakers vary freely in their pronunctiaton of /bŋ/ *vŋ ~vg* and /dg/ *rG ~rg*. (NB while underlying /-dVd#/ does not occur, the sequence /...d+d(a)/ can occur where /-d(a)/ is the past tense suffix; it that case, the outcome is [...rda], e.g. /seŋud/ 'knock down, knock over' > irreal. /esŋúd/ *eZgur*, past tense *> eZgúrda*.)
(c) Row 6, medial /g/ + C: It remains a stop, and voices following /p,t,k/; otherwise it lenits as expected; then voices following /s/, and lengthening following /z/ > *z:*
(d) Rows 7,8,9, nasals + C: Generally the nasals assimilate to homorganic stops, but otherwise shift to stops [p,b t,d k,g] depending on the voice of the following sound. That would be due, presumably, to development of an excrescent stop in a cluster e.g. /ŋ+t/ via /ŋkt/ > *kt*. Note that in the clusters m+d/g and n+d/g, the stops do not lenit; while *b* lenits following /n, ŋ/, as do *d,g* following /ŋ/. Note that the clusters /nm/ and /nŋ/ metathesize. Regarding /ŋ+p,t,k/ and /ŋ+l/, there are a few archaic forms where /ŋ/ shifts to /ʔ/ (and p,t,k > b,d,g)-- the native pronunciation of their ethnonym Laŋ-laŋ ['laʔlan] being one of the few examples. Note too that the cluster *nz* is almost always pronounced, though never written, with a very clear intrusive *d* -- [ndz]
(e) Rows 10,11, /l/ and /s/ + C: /l/ has few effects, save for /ld/, where /d/ does not lenit, and /ll/ which > *dl* (or sometimes [l:], not acceptable in formal speech). Similarly, /s/ > ś [š] always, in pre-consonantal position-- it devoices a following *r,G*, but voices > [ž] preceding /ŋ/ (> *g*) and /z/.

(f) Row 12, /z/ + C: unlike /s/, /z/ does not > fricative except preceding lenited G. The rare cluster /zz/ > dz

(g) Row 13, /h/ + C: /h/ simply deletes, with compensatory lengthening of the preceding (stressed) vowel. It also devoices following /l,z/ as well as lenited v,r, and G (> [h]); and /hs/ > ś.

(h) Row 14, /y/ + C: Medial /y/ causes fronting/lengthening of the preceding stressed vowel--the same changes that were cited above --then metathesizes with, and palatalizes, the following consonant. (We write these as "C,".) Original final /p,t,k/ are voiced in this environment. Most "palatalized" consonants could be considered clusters, C+y; however, the C, is clearly the onset of its syllable, as only the higher allophones of ü/ö occur in the initial (now open) syllable. Moreover /k/ and /g/ > distinctly affricated [tš] and [dž] resp., while *t,* and *d,* remain dental but with slight fricative offset (e.g. t, = [tˢʲ]), and should not be confused with *k,* and *g,*. Some speakers carry over the y-affect and front the now-final unstressed V (affects only /a,u/ since /i/ does not occur after /y/ within a base), but that is considered very careless and unsophisticated. (An example might be useful here: /suyan/ 'other, different', *suyån ~ sün,å* ['sy.njɔ], or careless "*sün,ä*" ['sy.njæ].

1.8. INITIAL CV- METATHESIS, i.e. $C_1V_1[+str]C_2V_2(C) > V_1C_1C_2V_2[+str](C)$--
This, along with stress-shift to the ultima, forms the irrealis of verbs-- ex. /pápat, appát/ > apfát. Final vl.stops do not voice, but vd.stops do undergo lenition. Because of the stress, vowel harmony does not occur. As mentioned above, some irregular nouns and occasional combining forms of other words also exhibit this metathesis, but usually without stress shift

All C may occur in initial and medial positions, resulting in clusters not permitted in underlying final syllables, like C + h/y or identical /bb, dd, ŋŋ/ et al. Note that this metathesis also applies to /CVCV/ forms.

TABLE 3: PHONETIC CHANGES WITH INITIAL CV- METATHESIS
(Initial C_1 in the left-hand DOWN colum, MEDIAL C_2 in the top ACROSS row. As in the preceding section, comments will follow.)

↓ →	p	t	k	b	d	g	m	n	ŋ	l	s	z	y	h
1, p	Vpf	Vpt	Vpk	Vv:	Vpr	Vph	Vfm	Vfn	Vfŋ	Vfl	Vfs	Vvz	Vp,V	Vph
2. t	Vtp	Vts	Vtk	Vtf	Vtr	Vth	Vtm	Vtn	Vdŋ	Vtl	Vts	Vdz	Vt,V	Vth
3. k	Vkp	Vkt	Vk?	Vkf	Vkr	Vkh	Vkm	Vkn	Vŋ:?	Vkl	Vks	Vgz	Vk,V	Vkh
4. b	Vfp	Vft	Vfk	Vbv	Vvr	VvG	Vvm	Vvn	Vvŋ	Vvl	Vbz	Vvz	Vb,V	Vf:
5. d	Vrp	Vrt	Vrk	Vrv	Vrd	VrG	Vrm	Vrn	Vrŋ	Vdl	Vrs	Vrz	Vd,V	Vrh
6. g	Vgb	Vgd	Vg:	VGv	VGr	VG:	VGm	VGn	Vŋ:	VGl	Vgz	VGz	Vg,V	Vx:
7. m	Vmp	Vpt	Vpk	Vmb	Vbd	Vbg	Vm:	Vmn	Vbŋ	Vbl	Vps	Vbz	Vm,V	Vmph
8. n	Vmp	Vnt	Vŋk	Vnv	Vnd	Vŋg	Vmn	Vn:	Vŋn	Vdl	Vts	Vnz	Vn,V	Vnth

	p	t	k	b	d	g	m	n	ŋ	l	s	z	y	h
9. ŋ	Vkp	Vkt	Vk:	Vgb	Vgd	Vg:	Vgm	Vgn	Vŋ:	Vgl	Vks	Vgz	Vŋ,V	Vŋkh
10. l	Vlp	Vlt	Vlk	Vlv	Vld	VlG	Vlm	Vln	Vlŋ	Vdl	Vls	Vlz	Vl,V	Vlh
11. s	Vśp	Vśt	Vśk	VZv	VZr	VZG	Vśm	Vśn	VZg	Vśl	Vś	VZ:	VśV	Vś:
12. z	Vzb	Vzd	Vzg	Vzv	Vzr	VzG	Vzm	Vzn	Vzŋ	Vzl	VZ	Vdz	VZV	VZ:
13. h	V:ph	V:th	V:kh	V:p	V:t	V:k	V:m	V:n	V:ŋ	V:hl	V:ś	V:s	V:hyV	V:x
14. y	[V]p	[V]t	[V]k	[V]v	[V]r	[V]G	[V]m	[V]n	[V]ŋ	[V]l	[V]ś	[V]Z	[V]Z,V	[V]h

(Preliminary note: the initial V symbol preceding the clusters in the table is simply a reminder that #C₁VC₂- > #VC₁C₂- without change to the V, except (a) lengthening by /h/ in 13, and (b) as indicated by "[V]" in 14, changes due to the metathesized initial /y/. Similarly, in the medial /y/ *column*, the "V" following the cluster also indicates change to the V quality, again due to the palataliztion caused by medial /y/).

Comments:
Rows 1,2,3, /p,t,k/ + C: /p/ remains *p* before stops, /y/ and /h/, shifts to *f* before the other continuants, voicing before /z/. The shift /pp/ > *pf* is common in Prevli; the shift /pb/ > *v:* can only be called idiosyncratic. /t/ and /k/ remain, but voice preceding /ŋ, z/-- presumably /kŋ/ > *gŋ* causes the gemination/length of the /ŋ/. The pronunciation of palatalized consonants (column /y/) and aspirated *ph, th, kh* was discussed above.
Rows 4,5, /b d/ + C: These lenit in all environments with the exception of /bs/ which > *bz,* and (both) before /y/. Long/geminate *f:* < /bh/ is via [vh]; *rh* is a voiceless tap or trill. (There are dialects where /bb/ is pronounced [v:], the standard's [bv] is probably by analogy with /pp/ *pf*.
Row 6, /g/ + C: As so often elsewhere, /g/ behaves idiosyncratically, reverting to a stop (and causing voicing) before /p t k s/ as well as /y/, but leniting elsewhere; /gh/ via [ɣh] results in long/geminate *x:*.
Rows 7,8,9, /m n ŋ/ + C: As in the preceding section, these cluster with their homorganic stops, but shift to *p~b, t~d, k~g* elsewhere. Note the metathesis of /nm/ and /nŋ/. Further, the intrusive stops are retained when the nasals custer with /h/, resulting in *nasal+aspirated p,t,k*.
Row 10, /l/ + C: Straightforward developments; /d/ remains as a stop, since the combination *lr* is not permitted in Prevli phonology; similarly /ll/ > *dl.* /lh/ > voiceless l, but written *lh*.
Row 11, /s/ + C: As in all cases, /s/ > fricative *ś* in preconsonantal position, voicing > *Z* before the lenited v,r,G, and /ŋ/ and /z/. The clusters /ss, sy, sh/ all > *ś*, but the latter two are distinguised from the first by (a) quality of the following V or (b) length, respectively. Many speakers also pronounce /sy/ with a clear palatal offset, [šj], which is quite acceptable.
Row 12, /h/ + C: Metathesized /h/ everywhere lengthens the now-preceding vowel; vl.stops become aspirated, vd.stops, /l/ and /z/ are devoiced; /hy/ is [çj]; /hs/ > *ś*, and /hh/ > x.
Row 13, /y/ + C: The principal effect is fronting of now-preceding /a o u/ and lengthening of /e/ (/i/ does not occur in #/yi.../#); it does not affect following consonants, except in the case of /yy/, which > palatalized *Z,* [žj] with fronting/length of the following V. There is thus a contrast between /yz/ and /yy/-- for ex. /yázut > ayzút/ *äZút* [æ'žut] vs. /yáyut > ayyut/ *æZ,üt* [æ'žjyt]

1.9. INITIAL CV-METATHESIS OF NON-/CVCV(C)/ FORMS. Since this metathesis forms the irrealis of verbal forms, the question must arise: what happens in cases (1) where the verb has no initial C (i.e. /VCVC/ and rare /VCV/), or (2) no medial C, in the rare cases of CVV and CVVC?

(1) Vowel-initial forms behave as if there were an initial /h/, and metathesize as in Row 12; e.g. /ábit/ aved 'tight', realis áfte; irrealis a:fít (as if < /habít/).

(2) CVV(C) forms undergo CV- metathesis, but geminate/lengthen the now-medial consonant; e.g. /mei/ realis mee [meʔe] 'to want', irr. em:í, or, /boad/ realis bôr 'ought to', irr. obvár (=ob:ár).

There are no verbal forms with underlying shapes /CV/ or /CVC/.

1.10. INITIAL CONSONANT REDUPLICATION. A fairly productive procedure, this forms nouns from verbs, usually with the meaning "thing which is VERB-ed" (nomen patientis); thus < /bili/ 'to speak' we find /b-b-ili/ bbili [(ə)'bvili] 'speech' (more in the sense "ability, or language" than "oration"). The [ə] onset occurs if the preceding word ends in a consonant; but most such phrasal occurences can usually be adjusted so that a vowel precedes-- thus in *kan diek bbili* 'my speech', the schwa will occur, but not in alternative *kan deika bbili*. But these forms may have other meanings, e.g. locative in /dayam/ realis *däm,a* 'to build/lay a fire', but /d-dayam/ > *ddäm,a* 'fireplace, fire-pit'. Nouns may occasionally show initial-C reduplication, usually to form collectives-- /kalap/ *kalab kalpa* 'ceramic cooking pot' > /k-kalap/ *kkalpa* 'pots and pans, *batterie de cuisine'*; but most such nouns seem to be lexicalized, and the procedure is only semi-productive with nouns.

Many of the changes seen in the following table will be familiar from the discussions above; only *dd, gg* and the nasals differ here.

TABLE 4: PHONETIC CHANGES IN INITIAL-C REDUPLICATION

pp > pf	tt > ts	kk > kʔ	bb > [əbv-]	dd > [əd:-]	gg > [əg:-]
mm > [əmb-]	nn > [ənd-]	ŋŋ > [əŋg-]	ll > dl		
ss > ś	zz > dz	hh > x	yy > Z		

Note: ś, x and Z do not have the schwa onset, except in very formal speech.

V-initial words behave as if there were an initial /h/: /epid/ real. *epri* 'high, elevated' > *xepri* 'height, elevation, altitude' as if < /h-hepid/; but such forms are rare, and many speakers add a simple [h] rather than "correct" [x]; many of the forms seem to be lexicalized, like *huZvil* 'silence' < uZvil 'be silent, not speak'.

1.11. INITIAL SYLLABLE REDUPLICATION. This is used to form (1) more-or-less "intensive" forms of (mostly) stative/adjectival verbs, and some adverbs-- it is not entirely

productive since it depends on the meaning of the base-- and (2) the "surprise" form of verbs and (occasionally) nouns-- quite productive, but they are often nonce-forms created on the spur of the moment and are not usually listed in the dictionary. The difference lies in stress placement, and whether the metathesized or unmetathesized form of the base is used.

(1) *Intensives,* usually realis, use the metathesized CVCCV base, the CVCV base, or the CVV(C) base, with vowel harmony as required, and stress on the penult as expected: e.g. *zála* 'bad', *zazála* 'very bad', or, /nuban/ *nůʋnå* 'new', *nunůʋnå* 'very new, brand-new'. Paraphrase is always possible-- *muhu nuʋnå* also means 'very new'. Here too, nonce-forms can be created, but may not be understood, e.g. /todim/ real. *tormö* 'to know s.t.'-- *totormö* could mean 'definitely/certainly know...', but again, a paraphrase might be preferable. An example of an adverb: *tusi* 'now', *tutusi* 'right now' (colloq. *tutsi*).

Irrealis forms are possible, though somewhat formal and archaic; they have reduplication of the *initial VC-*, e.g. *azlá* '(probably) bad', *azazlá* '(probably) very bad'--but they are rare in modern usage where paraphrases are preferred-- *muhu azlá.*

(2) "Surprise" forms, as the term term says, express surprise, wonderment, or great emphasis-- "really X, amazingly X, abolutely X" if verb-based, "quite a X, what a X" if noun-based-- and depending on tone of voice or context they may be intended seriously or ironically/sarcastically. They reduplicate the initial syllable, use the unmetathesized base (hence are neutral as to realis/irrealis), and shift stress to the ultima (thus blocking vowel harmony). Final voiced stops lenit as usual, but voiceless stops do not. Further, the stressed particle /há/ is added to the phrase, a sort of verbal exclamation point, and the base's final stop (if present) is modified by the following /h/ following the rules for Initial CV- metathesis in Table 4 (h-column). Examples: *zazalá há* 'really bad!', *nunuván há* 'really new!' (pronounced [nunu'van'tha] or, sarcastically like modern American slang, "really new...NOT!" implying perhaps "Wow, you've re-invented the wheel!"; /mei/ real. *mée* [me?e] 'want to...', surprise *memeí há* '(I) really want to!'.

Surprise forms usually occur in short, exclamatory expressions-- they may be negated, and the phrase may contain a noun, but seldom more. Verb-based forms may occasionally be used in a complete sentence, in which case *há* is omitted (more on this in the Syntax section.)

(Two phonetic notes: (1) if the base has an initial voiced stop, it lenits under CV-reduplication-- /dinin/ real. *dindi* 'cold', intensive *diríndi* 'very cold', suprise *dirindí há* 'really/surprisingly cold!', or /boad/ *bôr* 'ought to...' *boʋoár há* '(you) really ought to!, of course (you) should!'.
(2) Vowel-initial bases insert their "hidden" /h-/ in CV- reduplication: /abit/ *aved,* real. *afte* 'tight' > intensive *aháfte* 'very tight', surprise *ahaʋít há* 'really tight!' [aha'vi'tha].)

More information on usage of these forms will be given in the Syntax <mark>§....</mark>

1.12. CHANGES/ASSIMILATIONS ACROSS A MORPHEME BOUNDARY. Among the morphemes that can be involved are: prepositions (which may be prefixed), negative /usu/, negative imperative /daza/, the various verbal person and possessive suffixes, noun plural suffix /ta/, the past, future and conditional tense suffixes, and many of the prefixed auxiliary verb forms used to form the various aspectual verbs. Since a limited number of final+initial C combinations are involved, such changes as take place will be dealt with when the individual cases are discussed.