

jasn	UR
jasna	feminine
jasno	neuter
jasni	plural
jasan	[a] insertion

There is one example, however, that causes problem to our epenthesis rule. We stated that [a] is inserted root-finally between two consonants. As we can see, this doesn't happen in the following case:

4. Variation 2:

mukao	mukla	muklo	mukli
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Remembering the previous observations, we can conclude that the stem form is 'mukl', and [a] is inserted between the two consonants, satisfying the epenthesis rule. The following data support our assumption:

beo	bela	belo	beli
mio	mila	miilo	mili
veseo	vesela	veselo	veseli
ustao	ustala	ustalo	ustali

Apparently, [l] is becoming [o] in these cases here. This will be the vocalization rule:

5. Vocalization:

[l] -----> [o] / _____ #

Following the pattern established so far, we can assume that the masculine forms are:

beo	mio	veseo	ustao
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We need to state now in what order these rules are operating:

6. Rule Ordering:

- I. mukl Stem
- II. mukal Epenthesis ([a] is inserted)
- III. mukao Vocalization ([l] is becoming [o])

Application of the various endings gives us:

mukao	mukla	muklo	mukli
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This seems appropriate because if we reverse the rule ordering-vocalization before epenthesis-it would result in ungrammatical forms.

Now that we have discussed segmental alternations, we need to discuss the location of the accent. If we look at the data carefully, it becomes clear that the accent generally falls on the rightmost vowel of the word. The following data strengthens our assumption:

7. Accent Placement:

mlad	mlada
pust	pusta
bel	bela
mil	mila
zelen	zelena
jasn	jasna
dobr	dobra
mukl	mukla

Based on the data, we need to posit a rule for accent placement.

8. Accent Placement Rule:

V -----> V where V is the rightmost vowel of the word.

We need to specify the sequence of rules. It is reasonable to assume that the accent placement rule operates before epenthesis and vocalization. It follows that in

proposing rules, we should explain only the possible grammatical forms. If we reverse the rule ordering, i.e. apply epenthesis before the accent placement rule, we will get ungrammatical forms.

9. Rule Ordering:

mukl	Stem	
mukl	mukla	Accent Placement
mukal	mukla	Epenthesis
mukao	mukla	Vocalization

10. Verbs:

We have already determined the suffixes to be o, a, and respectively. Now we need to pinpoint the past and 1st singular present endings:

1 sg. Pres	Past-Masc.	Past-Fem	Past-Neut
tepem	tepao	tepla	teplo
skublem	skubao	skubla	skublo
tresem	tresao	tresla	treslo
vezem	vezao	vezla	vezlo
pecem	pekao	pekla	peklo
zezem	zegao	zegla	zeglo

Underlying forms:

tepao	skubao	tresao	vezao	pekao	zegao
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Suffixes:

The data show that the 1st singular present suffix is -em, and the past morpheme is -l. On the surface, the past-masculine appears to be contradicting our assumption. But our vocalization rule seems to be at work in this particular case. We stated earlier that l becomes o when followed by #. This accounts for the fact that the past morpheme has an -o ending.

Some other verbs such as 'kradem', 'pletem', 'metem', and 'vedem' indicate that our rule ordering is not accurate. That is to say, we need an additional rule to account for the following:

kradem	kralo	krala	kralo
pletem	plelo	plela	plelo
metem	mel	mela	melo
vedem	vel	vela	velo

A close scrutiny of the data reveals that another rule is deleting [t] or [d] before an [l]. We will call this rule coronal deletion rule.

11. Coronal Deletion:

[t/d] -----> o / _____ [l]

To derive the forms listed above, we must order the rule as follows:

1. Accent Placement
2. Coronal Deletion
3. Epenthesis
4. Vocalization

The motivation for ordering rules in this way comes from the fact that if we apply the epenthesis rule before coronal deletion, we get ungrammatical forms. For example, if we apply epenthesis rule first, we will get forms such as 'pletal', 'kratal', 'metal', etc. because vocalization has not taken place yet under this wrong assumption. Therefore, it

must be the case that the coronal consonants [t/d] are deleted first to prevent the derivation of ungrammatical forms. Also, in this particular case, epenthesis cannot take place after coronal deletion because the requirements for epenthesis are not fulfilled; there must be two consonants for epenthesis to occur.

12. Deviation

Data:

pacem	pekao	pekla	peklo
zezem	zegao	zegla	zeglo

Underlying forms:

peg
zeg

13. Palatalization:

We now must account for the k ~ c and g ~ z alternations:

[+velar] -----> [+palatal] / _____ e

This is our palatalization rule which applies in the following way:

pecem	pekal	pekla	peklo
zezem	zegal	zegla	zeglo

There is no data which gives us reason to believe that palatalization needs to be ordered with the other rules in any particular way.