

Mising Morphophonemics

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In Mising, as in other languages, sounds tend to get modified in different phonetic environments. Mising has a strongly affixative morphological system, and, therefore, such modifications are frequent in this language.

I. When a vowel is followed by a consonant or by a consonant by a vowel, there is no phonetic modification, e.g.,

(a) Vowel followed by a consonant:

/abu/	'father'	+ -də	(definite article)	=	/abudə/
...		+ -ko	(indefinite article)	=	/abuko/
...		+ -ma	(negativizer)	=	/abuma/ etc.

(b) Consonant followed by a vowel:

/takar/	'star'	+ -ə	(nominative suffix)	=	/takarə/
...		+ -a	(vocative suffix)	=	/takara/
...		+ -o:	('plenty of' suffix)	=	/takaro:/ etc.

(N.B. It should, however, be remembered that although syllable-final, and therefore morpheme- and word-final plosives lose the voiced/voiceless opposition, morpheme-final plosives followed by vowels are always voiced, e.g.,

/alap/ or /alab/	'bird's wing'	+ -o:	=	/alabo:/	'plenty of wings'
/tapat/ or /tapad/	'leech'	+ -a	=	/tapada/	'O leech!'
/kopak/ or /kopag/	'banana'	+ -ə	=	/kopagə/	'banana' (nom)

In this treatment, only /b, d, g/ are used in final positions, in which case the plosives also conform fully to I(b) above.)

II. When a consonant is followed by another consonant, phonetic modification takes place in the following environments:

(a) Modifications by way of regressive assimilation take place extensively in the case of plosives. Taking the final plosives to be /b, d, g/ (see Note under Ib above), we might proceed to analyze these modifications as follows:

(i) /b/ becomes [p], when followed by voiceless consonants, e.g.

/kab/	'weep'	+	-po	=	/kappo/	'pleasant to weep'
...		+	-ten	=	/kapten/	'weep again'
...		+	-ka	=	/kapka/	'had wept'
...		+	-sed	=	/kapsed/	'added weeping'

/b/ becomes [m], when followed by /m/, e.g.

/kab/	+	-ma (negativiser)	=	/kamma/.
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/b/ is partially nasalized, when it is followed by the nasals /n, ŋ, ɲ/ but no modification takes place when it is followed by voiced sounds other than the nasals.

(ii) /d/ becomes [t], when followed by voiceless consonants, e.g.

/ad/	'write'	+	-po	=	/atpo/	'pleasant to write'
...		+	-ten	=	/atten/	'to write again'
...		+	-sed	=	/atsed/	'add to what is written'
...		+	-kin	=	/atkin/	'know how to write'

/d/ becomes [n], when followed by /m, n, ŋ, ɲ/, e.g.

/ad/	+	-ma	=	/anma/	'write not'
/ad/	+	-nam	=	/annam/	'to write'
/ad/	+	-ŋer	=	/anŋer/	'to be fed up with writing'
/ad/	+	-ɲin	=	/anɲin/	'tedious to write (with)'

/d/ becomes [l], when followed by /l/, e.g.

/ad/	+	-len	=	/allen/,	'write out'
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/d/ becomes [r], when followed by /r/, e.g.

/ad/	+	-rə	=	/arre/	'fee for writing'
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/d/ becomes [j], when followed by /j/, e.g.

/ad/	+	-jo (imperative negative)	=	/ajjo/	'don't write'
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No modification takes place when /d/ is followed by /b, d, g/ and vowels.

(iii) /g/ becomes [k], when followed by voiceless consonants, e.g.

/dug/	'run'	+ -po	=	/dukpo/	'pleasant to run'
...		+ -to	=	/dukto/	'run' (imperative)
...		+ -kin	=	/dukkin/	'to know how to run'
...		+ -sum	=	/duksum/	'gather together by running'

/g/ becomes [ŋ] when followed by /ŋ/, e.g.

/dug/	+ -ŋŋ	=	/duŋŋ/	'the rest of the race'
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No modification takes place when /g/ is followed by voiced sounds except /ŋ/. Partial nasalization of /g/ can, however, be discerned when it is followed by /m, n, ɲ/.

(b) Morpheme-final /ŋ/ undergoes an important modification when it is followed by various consonants except /k, g, ŋ/. In such cases, /ŋ/ is replaced by vowel length, e.g.

/siman/	'corpse'	+ -pə	=	/sima:pə/	'like a corpse'
...	+	-bə	=	/sima:bə/	'that corpse to the south'
...	+	-tə	=	/sima:tə/	'that corpse to the north'
...	+	-də	=	/sima:də/	'the corpse'
...	+	-ma	=	/sima:ma/	'not a corpse'
...	+	-lo	=	/sima:lo/	'on a corpse'
...	+	-so	=	/sima:so/	'on this corpse'
...	+	-runko	=	/sima:runko/	'a corpse for sure'

/duŋ/	'sit' (root)	+ -nə	=	/du:nə/	'one who sits'
...	+	-ɲŋ	=	/du:ɲŋ/	'unpleasant to sit'
...	+	-zon	=	/du:zon/	'sitting companion'
...	+	-rə	=	/du:rə/	'fee for sitting'
...	+	-jo	=	/du:jo/	'don't sit'

/ŋ/ gets deleted when it is followed by /ŋ/, e.g.

/duŋ/	+	-ŋŋ	=	/duŋŋ/	'begin to sit'
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No modification takes place when /ŋ/ is followed by /k, g/, e.g.

/siman/	+	-ko	=	/siman̥ko/	'a corpse'
/duŋ/	+	-gor	=	/duŋgor/	'to sit hurriedly' etc.

(c) There are not many instances of progressive assimilation in the language. The following dialectal and idiolectal phenomena may be noted:

(i) /l/ becomes [r], when preceded by /r/, e.g.

/kar/	'to peel'	+	-len	=	karren	'to peel off'
/kor/	'to take a step'	+	-lad	=	korrad	'to take a step back'

(ii) /l/ becomes [n], when preceded by /m/, e.g.

/tam/	'to spread'	+	-len	=	/tamnen/	'to spread out'
/kum/	'to salute'	+	-la	=	/kumna/	'having saluted'

However, these instances of progressive modification, particularly (ii), are by no means regular.

III. Some important modifications occur when a morpheme-final or word-final vowel is followed by another vowel. These modifications may be classed under four heads:

- A. Insertion of /j/
- B. Insertion of /w/
- C. Deletion of vowels
- D. Gemination of consonants

A. Insertion of /j/

When a morpheme or word ends with the front long vowels /i:/ or /e:/ and takes a vowel suffix¹, /j/ is inserted in place of the vowel length, e.g.

/tani:/	'man'	+	-ə	(nominative and copula)	=	/tanijə/
/ka:ni/	'opium'	+	-ə	"	=	/ka:nijə/
/tame:/	'tail'	+	-ə	"	=	/tamejə/
/ja:me:/	'young man'	+	-ə	"	=	/ja:mejə/
/tani:/	+	[-o:]	('plenty of' suffix)			= /tanijo:/
/ka:ni:/	+	[-o:]	"	"	"	= /ka:nijo:/
/tame:/	+	[-o:]	"	"	"	= /tamejo:/
/ja:me:/	+	[-o:]	"	"	"	= /ja:mejo:/
/tani:/	+	[-a]	(vocative suffix)			= /tanija/
/ja:me:/	+	[-a]	"	"	"	= /ja:meja/ etc.

¹ 'Vowel suffix' includes suffixes beginning with vowels.

B. Insertion of /w/

(i) When a morpheme or a word ends with the back long vowels /o:/ or /u:/ and takes a vowel suffix, /w/ is inserted in place of the lengths of /o:/ and /u:/. Examples:

/ko:/	'boy'	+	-ə	=	/kowə/
/ro:/	'morning'	+	-əm	=	/rowəm/ 'in the morning'
/jo:/	'night'	+	-əm	=	/jowəm/ 'at night'
/su:/	'at present'	+	-o: (here, 'only')	=	/suwo:/ 'only at present'
" "	+	-i: (emphasizing suffix)		=	/suwɪ:/ 'yes, at present'

(ii) When a morpheme or a word ends in a diphthong with /u/ as the second member and takes a vowel suffix, the second element of the diphthong, i.e., /u/, is replaced by /w/. Examples:

/biu/	'festival'	+	-ə	=	/biwə/
/lau/	'kind of gourd'	+	-o	=	/lawə/ 'plenty of gourds'
/oijau/	'youngest one'	+	-a	=	/oijawa/ 'O youngest one'
/tou/	'cooking pot'	+	-o:	=	/towo:/ 'plenty of pots'
/dəu/	'wave'	+	-ə	=	/dəwə/

(iii) When a morpheme or a word ends in the high central vowel /ɪ:/ and takes a vowel suffix, a velarised /w/, i.e. [w], is inserted in place of the length of /ɪ:/, e.g. /bɪ:/ 'he' + -o: (here meaning 'only') = /bɪwo:/ 'only he'.

C. Deletion of vowels

(i) When a word or a morpheme has a syllabic structure (C)V:CV, i.e., when it ends with a short vowel but is preceded by a long vowel in the penultimate position, and is followed by a vowel suffix, the final short vowel gets deleted. This may be represented abstractly as (C)V:CV + -V = (C)V:CV. Examples are:

/do:ɲi/	'the sun'	+	-ə	=	/do:ɲə/
/a:je/	'fruit'	+	-ə	=	/a:je/
/do:la/	'kind of winnowing fan'	+	-ə	=	/do:lə/
/po:lo/	'the moon'	+	-o:	=	/po:lo:/ 'only the moon'
/po:ro/	'kind of rice beer'	+	-o:	=	/po:ro:/ 'po:ro only'
/go:ru/	'cow'	+	-o:	=	/go:ro:/ 'cows only'
/a:je/		+	-ɪ:	=	/a:jɪ:/ 'Yes, (it is) fruit'
/po:ro/		+	-ɪ:	=	/go:rɪ:/ 'Yes, (it is) cow'
/do:ɲi/		+	-a	=	/do:ɲa/ 'O Sun!'
/po:lo/		+	-a	=	/po:la/ 'O Moon!'
/ka:ki/	'mother's brother, father-in-law'	+	-a	=	/ka:ka/ etc.

(ii) The following exception to the above vowel deletion rule may be noted. When the word or morpheme-final vowel is /o/ and is followed by -ə, the phonetic modification that takes place is as follows:

/po:lə/ + -ə = /po:lə/, NOT */po:lə/
 /po:ro/ + -ə = /po:ro/, NOT */po:rə/

D. Consonant gemination

Whereas the insertion of /j/ and /w/ applies to words or morphemes ending in a long vowel, and the deletion of vowels to words or morphemes with a long vowel in the penultimate position and a short vowel in the final position, the rule for the gemination of consonants applies to words or morphemes having short vowels in both the penultimate and final positions. But the gemination is realised simultaneously with vowel deletion. The rule for the gemination of consonants may therefore be called a composite rule in which two kinds of phonetic modification occur simultaneously. This may be illustrated under the following sub-heads:

(i) (C)VCV + -V = (C)VCCV. Examples:

/sita/	'elephant'	+	-ə	=	/sittə/	'elephant' (nom. or copula)
"	"	+	-o:	=	/sitto:/	'elephant only'
"	"	+	-i:	=	/sittɪ:/	'Yes, (it is) elephant'
/alə/	'foot'	+	-ə	=	/allə/	
"	"	+	-o:	=	/allo:/	
"	"	+	-i:	=	/allɪ:/	
/pekɪ/	'dove'	+	-ə	=	/pəkkə/	
"	"	+	-o:	=	/pəkkə:/	
"	"	+	-i:	=	/pəkkɪ:/	
"	"	+	-a	=	/pəkkə/	'O dove!'
/uju/	'god'	+	-o	=	/ujjo:/	
"	"	+	-i:	=	/ujjɪ:/	
"	"	+	-a	=	/ujja/	
/alo/	'salt'	+	-o:	=	/allo:/	
"	"	+	-i:	=	/allɪ:/	etc.

(N.B. It by be noted that the phonetic modifications in the case of /alo/ and /alə/ have resulted in some homophones, and that resultant /jj/ is phonetically similar to /ij/.

(ii) An exception to the above rule can be seen in the case of morphemes or words ending in /o/ and /u/ followed by a suffix beginning with /ə/, the gemination part of the rule remaining unaffected. The vowels affected undergo the following change:

/u/ + /ə/ = /o/, e.g.
/o/

/uju/	'god'	+ -ə	=	/ujjo/	
/polu/	'silkworm'	+ -ə	=	/pollo/	
/abu/	'father'	+ -ə	=	/abbo/	
/amo/	'elder brother's wife'	+ -ə	=	/ammo/	
/alo/	'salt'	+ -ə	=	/allo/	etc.

(N.B. The dialectal and idiolectal variant /uju/ + -ə = /ujjə/ should be noted.)

(iii) When the final vowel concerned is either /i/ or /e/, we have an altogether different kind of phonetic modification as shown below.

(a) /i/ + /ə/ = /e/, e.g.
/e/

/ami/	'person'	+ -ə	=	/amme/
/ake/	'some'	+ -ə	=	/akke/
/asi/	'water'	+ -ə	=	/asse/
/tase/	'grass sp.'	+ -ə	=	/tasse/

(b) /i/ + /-i:/ = /i:/, e.g.
/e/

/ami/	'person'	+ -i:	=	/ammi:/
/papi/	'chip of wood'	+ -i:	=	/pappi:/
/pəzi/	'kind of plant'	+ -i:	=	/pəzzi:/
/boze/	'large quantity'	+ -i:	=	/bozzi:/
/tase/	'kind of grass'	+ -i:	=	/tassi:/

(c) /i/ + /o:/ = /jo:/, e.g.
/e/

/ami/	'person'	+ -o: =	/ammjo:/
/papi/	'chip of wood'	+ -o: =	/pappjo:/
/ake/	'some'	+ -o: =	/akkjo:

(d) /i/ + /a/ = /ja/, e.g.
/e/

/ami/	'person'	+ -a =	/ammja/	
/papi/	'chip of wood'	+ -a =	/pappja/	etc.

(N.B. The geminates /ss/ and /zz/, particularly the latter, are not realised phonetically in the language. Phonetically, the first /s/ of /ss/ is [t], and the second is the palatal vl. stop [c], i.e. /ss/ = /tc/; again, the first /z/ of /zz/ = [d] and the second is the palatal voiced stop [j], i.e. /zz/ = [dj]. This may be explained by the following phonetic rules for Mising:

(1) /s/, when followed by /s/, becomes [t]
/z/, when followed by /z/, becomes [d]

(2) /s/, when preceded by /t/, becomes [c]
/z/, when preceded by /d/, becomes [j]

When the geminates /ss/ and /zz/ are generated as a result of morphophonemic change, Rule (1) comes first into operation, and this, in turn, triggers off the operation of Rule (2). The process of phonetic change may, therefore, be represented thus:

/asi/	+ -ə	→	/asse/	→	/atse/	→	[atce]
/pezi/	+ -ə	→	/pæzze/	→	/pædze/	→	[pædje], etc.

The morphophonemics discussed under Sections I and II above are common to all the dialects of Mising. But some of the phonetic modifications discussed under Section III are not applicable to the two dialects, Sa:yang and Mo:ying, which are closer to some dialects of Arunachal than any other dialect in Mising. While these two dialects share with the other dialects the characteristics discussed in IIIA, and IIIB (ii), they do not conform to the modifications discussed in III B (i) and (iii), III C, and III D.

III.B (i) and (ii)

No /w/ is inserted in Sa:yang and Mo:ying, e.g.

/ko:/ + -ə	=	/kuə/	/ro:/ + -ə	=	/ruə/
/jo:/ + -əm	=	/juəm/	/su:/ + -o:	=	/suo:/
/bi:/ + -o:	=	/bio:/	etc.		

III.C

In some cases vowel deletion does not take place in Sa:yang and Mo:ying, e.g.

/do:ni/ + -ə	=	/do:nie/	/doni/ + -o:	=	/do:nio:/
/po:lo/ + "	=	/po:luə/	/po:lo + -a	=	/po:lua/
/go:ru + "	=	/go:ruə/	/go:ru/ + -o:	=	/go:ruo:/
/ka:ki/ + "	=	/ka:kie/	/ka:kɿ/ + -a	=	/ka:kia/

III.D

There is hardly any instance of consonant gemination as a result of vowel conjunction in the morphophonemics of Sa:yang and Mo:ying. The resultant forms of morphophonemic vowel conjunction in these two dialects may be illustrated as follows:

(i) /sita/ + -ə	=	/sitə/	/uju/ + -o:	=	/ujuo:/
/sita/ + -o:	=	/sito:/	/uju/ + -ə	=	/ujuə/
/sita/ + -ɿ:	=	/siti:/	/uju/ + -ɿ:	=	/ujuɿ/
			/uju/ + -a	=	/ujua/
(ii) /polu/ + -ə	=	/poluə/	/abu/ + -ə	=	/abuə/
/amo/ + -ə	=	/amuə/	/alo/ + -ə	=	/aluə/
(iii) (a) /ami/ + -ə	=	/amie/	/ake/ + -ə	=	/akeə/
/asi/ + -ə	=	/asie/	/tase/ + -ə	=	/taseə/
(b) /ami/ + -ɿ:	=	/amiɿ:/	/asi/ + -ɿ:	=	/asiɿ:/
(c) /ami/ + -o:	=	/amio:/	/ake/ + -o:	=	/akeo:/
(d) /ami/ + -a	=	/amia/	/papi/ + -a	=	/papia/

Since the present author is not a native speaker of Sa:yang or Mo:ying, he has refrained from formulating the principles for III.B. (i) and (ii), III.C., and III.D. above in respect to these dialects. But the points of divergence have been suggested.