Phonological Processes in Mising Language: A Privilege Theoretic Account

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Abstract
This paper is a descriptive study of Mising- an endangered language spoken in Assam. Mising is a Tibeto-Burman language which has lost certain characteristics of Tibeto-Burman languages due to the influence of Assamese. So, in this paper an examination has been done on some of the phonological processes that apply to Mising words in various contexts. These phonological processes are explained in terms of the Privilege theory propounded by Jill Beckman,“ Positional Faithfulness, 1998”.

1.0.Introduction:

Phonological processes are those through which we can observe and study the change in the segments of a morpheme. When a segment undergoes any change it is better represented through a phonological process. Phonological processes give a solid evidence of any kind of change a language goes through at any span of time. According to Beckman phones can show changes while undergoing any process while combining with other sounds to form morphemes/words. We need these phonological processes to link the two levels of representation: underlying (phonemic, mental) and surface (phonetic) representation to show when a particular allophone should show up on the surface. In surface representation some phonemes show enough strength not to undergo any change but to influence the other phonemes instead. This strength and weakness of the phonemes depends largely on the place where they are positioned in a morpheme. That is why some of the positions of a morpheme are privileged to influence and conduct the change to the phonemes placed in the less privileged or non-privileged positions.

This issue of strength and weakness is the soul of Jill N. Beckman's privilege theory.

2.0. Beckman's privilege theory:

In privilege theory Jill Beckman has discussed privileged positions and non-privileged positions. The privileged positions of a morpheme are root-initial syllables, stressed syllables, syllable onsets, roots and long vowels while non-privileged positions are non-initial syllables, unstressed syllables, syllable codas, affixes, clitics, function words and short vowels.

There are a variety of phonological asymmetries exhibited by segments which appear in perceptually or psycholinguistically prominent positions such as roots, root-initial syllables, stressed syllables, and syllable onsets. In such positions, segmental or featural contrasts are often maintained, though they may be neutralized in non-prominent positions. Segments in prominent positions frequently trigger phonological processes such as assimilation, dissimilation and vowel harmony; conversely, they often block or resist the application of these processes.

3.0. Descriptive phonology of Mising language from the perspective of Privilege Theory: A Preliminary study

Phonological processes give an identity to a language. Phonological processes of an endangered language are more important to keep the language alive in future. Language is such a property which can be lost in future if less practiced and this is the condition of this particular language, Mising, which is spoken in the North-east region of India. Mising language belongs to Tibeto-Burman language family. Original words of this language are slowly diminishing because of cross cultural habits and getting replaced by borrowed words from its neighboring language, Assamese, which is the main language of Assam. Both Assamese and Mising belong to two different language families which have different sets of characteristics. Despite of being from different language family background they interact and Assamese being the dominant, leaves its mark on Mising. The dictionary, grammar and sound system of Mising are getting affected by Assamese.

The pedagogical or education system seems to be a decisive cause for this effect of losing the language inheritance of Mising. Further not using Mising as a subject of study or medium of instruction has also collaborated with academic suffering of Mising. The role played by growing urbanization in encouraging aspirant parents to send their children to English medium schools or, in some cases, the Assamese medium school has to be considered while negotiating with the problem of Mising. The biased mindset of people seems to confine Mising, their mother tongue, as a language of ephemeral communication with their people in villages, and consider English or Assamese as more essential in everyday life. In the perspectives of villagers, the trade and business seem to have played a crucial role in acclimatizing themselves to Assamese for a better communication.

Religion is another big issue in Mising. Mising people generally worship the Sun and the Moon as their Gods but now they have taken Hinduism as their ultimate religion. In some Mising sacred rituals performed for someone the priests recite the prayers using the code mixing of both Mising and Assamese as some words are lost today in this process of better communication using the dominant language. It is not only Assamese that has influenced Mising. English too made its way into the language through some official dealings. But in this paper the main focus is given on borrowed words from Assamese and other phonological processes found in Mising.

4.0. Objectives of the study

The current study has the following objectives:
1. To commonly survey the phonological processes used in Mising.
2. To see if the phonological processes present in Mising work in loan word phonology.

4.1. Research questions:
I will try to look into matters like –
1. Which phonological processes are allowed in Mising?
2. Which are the most marked phonemes in Mising.
3. How are the onset, nucleus and coda of the borrowed words dealt with?

5.0. Findings:

5.1. Assimilation:
The term assimilation usually refers to contextual variability of speech sounds, which is said to be caused by the influence of one sound upon another. It is often defined as a process of replacing one sound (or changing some properties of a sound) under the influence of another sound which occurs near to it. It has also been characterized as an adjustment of speech sounds to their environment. Assimilation is a common phonological process by which one sound becomes more like a nearby sound. This can occur either within a word or between words. There are three types of assimilation; progressive, regressive and reciprocal but Mising language was found responding to only one of them, that is, regressive assimilation.

5.1.1.0. Regressive assimilation:
If the phoneme changes to match the following phoneme, it is regressive assimilation. (anticipatory/backward/right-to-left) **assimilation** occurs when in the sequence of segments AB segment B exerts influence on segment A. In other words, segment B is the assimilator while segment A is the assimilee: A ⇐B (Malmberg 1963: 61; Abercrombie 1967: 134; Daniloff and Hammarberg 1973: 242; Gay 1977: 183; Webb 1982: 310; Kráľ and Sabol 1989: 151, *inter alia*). Regressive assimilations are very frequent and are found in all languages. For example, consonants followed by a rounded segment tend to be labialized, e.g. *took* [tuk] (Benguerel and Cowan 1974; Benguerel and Adelman 1976; Lubker and Gay 1982; Fowler and Saltzman 1993: 185–187); vowels followed by nasal tend to be nasalized, e.g. *ten* [tɛ n], although the degree of nasalization in different languages may differ (Malécot 1960; Kráľ 1966; Ali et al. 1971; shijima and Hirose 1974; Fowler and Saltzman 1993: 187–188). Mising language shows both partial and total voicing and devoicing regressive assimilation.

5.1.1.1. Partial voicing regressive assimilation:
In this process maintaining the Faithfulness theory, the voiceless plosive of the coda position gets triggered by the voicing of the onset of the following word or suffix /d̪ə/ (definite marker) and takes the voicing and turn themselves into a voiced phoneme in the final output.

In source language	Assimilation	Output	Glossary
/pukap/ + /gəla lət̪ɔ/	p → b / _ g	/ pukab gəla lət̪ɔ /	Cover it and keep
/kat̪ɔk/ + /d̪ə/	k → g / _ d̪	/ kat̪ɔg d̪ə /	The knife
/t̪abat̪/ + /d̪ə/	t̪ → d̪ / _ d̪	/ t̪abad̪ d̪ə /	The comb

5.1.1.2. Total voicing regressive assimilation:
Here we can see the voiced plosive turning to nasal when followed by a nasal and in this case we get a geminated form. Here the coda position of the first word gets triggered from the onset of the following suffix /ma/ (negative marker).

In source language	Assimilation	Output	Glossary
/kab/ + /ma/	b → m / _ m	/ kamma /	Not cry

5.1.1.3. Partial devoicing regressive assimilation:
Here the voiced velar plosive of the coda position from the first word turns to its voiceless counterpart when followed by voiceless dental plosive in the form of an imperative marker /t̪ɔ/.

In source language	Assimilation	Output	Glossary
/kɔpag/ + /t̪ɔ/	g → k / _ t̪	/ kɔpakt̪ɔ /	Sell it
/d̪əmpag/ + /t̪ɔ/	g → k / _ t̪	/ d̪əmpakt̪ɔ /	Asking someone to beat up someone

5.1.1.4. Total devoicing regressive assimilation:

Here the voiced dental and bilabial plosives turn to their voiceless counterparts when followed by the same voiceless counterparts in the form of an imperative marker /t̪ɔ/ and negative marker /pɔjɔ/ and results in a geminated form.

In source language	Assimilation	Output	Glossary
/ad̪/ + /t̪ɔ/	d̪→t̪/ _ t̪	/ at̪t̪ɔ /	Write
/kab/ + /pɔjɔ/	b→p / _ p	/ kappɔjɔ /	Don't cry

5.2.0. Deletion:

Deletion is a process that removes a segment from certain phonetic context. This is a simple way to alter the structure of a word or to omit particular speech segments. There are two main speech segments that are typically deleted: consonants, and weak syllables. There are three deletion processes: Procope, Syncope and Apocope but only Apocope is found in Mising where it shows consonant deletion from the coda position.

5.2.1. Apocope:

In Apocope there is a loss of final sound, that means the coda position is prone to deletion because of its non-privileged position. Coda position is considered as non-privileged position because of its weakness to get changed or deleted when triggered by an onset of the following
word. In Mising language it is seen that the velar nasal is being deleted from the coda position of the first word when preceded by an open vowel and followed by the velar dental plosive in the form a definite marker /d̪ə/.

In source language	Deletion	Output	Glossary
/d̪iŋɔraŋ/ + /d̪ə/	ŋ → Ø / _____ d̪	/d̪iŋɔrad̪ə/	The pot made of bamboo to catch fish
/d̪i:ba:ŋ/ + /d̪ə/	ŋ → Ø / _____ d̪	/d̪i:ba:d̪ə/	The bamboo

5.3.0. Loan words in Mising:

Mising people live in Assam and hence Assamese has a considerable influence on the language because of the habitat and close connection with it. Even though Assamese is an Indo-Aryan language, Mising has borrowed from it to a considerable extent and has now begun to use them on a daily basis. Mising has several loanwords taken from other languages in contact like Hindi and English and all these loans have undergone several phonological changes based on the native Mising phonology. Generally the native speakers modify the borrowed words according to their needs to fit in the native language. The borrowed words from Assamese go under some modifications because of its difference from the native language phonology of Mising. The modifications can be seen through some phonological processes like:

5.3.1. Assimilation:
Assimilation in Mising loan word phonology is also found following the criteria of Jill Beckman's Positional Faithfulness Theory.

5.3.1.1. Partial voicing regressive assimilation:
This process shows the voiceless plosives of the coda position getting triggered by the voicing of the onset of the following word or suffix /ɖə/ (definite marker) and taking the voicing and turning them into a voiced phoneme in the final output and maintaining Beckaman's Privilege theory by changing the coda position but keeping the onset position intact.

In source language	In borrowed language	Assimilation	Output	Glossary
/kitap/	/kitap/+ /ɖə/	p → b / _ ɖ	/kitabɖə/	The book
/bʰaluk/	/bʰaluk/+ /ɖə/	k → g / _ ɖ	/bʰalugɖə/	The bear
/kakɔt̪/	/kakɔt̪/+ /ɖə/	t̪→ d̪ / _ ɖ	/kakɔd̪ɖə/	The paper

5.3.2. Insertion:
Unlike Mising word phonology, Mising loan word phonology shows the processes of insertion. The insertion is found in initial consonant clusters. When a word with initial consonant cluster is borrowed vowel insertion happens in the initial position and in between the initial two consonants and giving us the processes of Prosthesis and Epenthesis.

5.3.2.1. Prothesis:
This process in Mising loan word phonology denies Beckman and results in adding an extra sound in form of a vowel in the initial position of a morpheme. According to Beckman's
Privilege theory initial positions resist changes but we see the opposite of that in the following examples.

In source language	Prothesis	Output	Glossary
/spɔnɖɔn/	# Ø→ /i/	/ispɔnɖɔn/	Heart beat
/smɔxaːn/	# Ø→ /i/	/ismɔxaːn/	Graveyard

5.3.2.2. Epenthesis:
The process of Epenthesis in borrowed words too does not follow Beckman's theory and results in a vowel insertion in the root initial syllable which is considered as strong and privileged position and is not supposed to go under change.

In source language	Epenthesis	Output	Glossary
/prapt̪ɔ/	Ø→ a / C_C	/parapt̪ɔ/	Deserved
/krut̪i/	Ø→ u / C_C	/kurut̪i/	Mistake
/klex/	Ø→ e / C_C	/kelex/	Misconception

5.3.3. Deletion:

Unlike the original Mising word phonology the loan words show all the processes of deletion but some irregularity as well if noticed from the perspective of the Faithfulness theory.

5.3.3.1. Procope:

Here the onset position of the borrowed word gets deleted in the borrowing language denying the Positional Faithfulness Theory of Jill Beckman. Beckman has said that onsets are the privileged positions which trigger changes but do not get triggered. So, Procope in Mising loan word phonology can be considered as a irregular phenomenon considering Jill Beckman's Positional Faithfulness Theory.

In source language	Deletion	Output	Glossary
/xanti/	x → Ø / __ v	/anti/	Peace
/xukurbar/	x → Ø / __ v	/ukurbar/	Friday
/xukʰ/	x → Ø / __ v	/uk/	Happiness

5.3.3.2. Syncope:

In this process the /h/ sound gets deleted from the medial position which is considered valid according to Beckman as non-initial syllables are also considered as non-privileged positions which are prone to change or deletion in a phonological process.

In source language	Deletion	Output	Glossary
/gahɔri/	h → Ø /v __ v	/gaɔri/	Pig
/bihari/	h → Ø /v __ v	/biari/	Someone from Bihar
/pahɔra/	h → Ø /v __ v	/paɔra/	To forget

5.3.3.3. Apocope:

This process of deletion is similar to the original Mising word Apocope where it is seen that the velar nasal is being deleted from the coda position of the first word when followed by the velar dental plosive in the form a definite marker /ḓə/.

In source language	In borrowed language	Deletion	Deletion	Output	Glossary
/pɔisa/	/pɔisaŋ/	/pɔisaŋ/+/ḓə/	ŋ → Ø / __ ḓ	/pɔisaḓə/	The money
/tʰurija/	/turijaŋ/	/turijaŋ/+/ḓə/	ŋ → Ø / __ ḓ	/turijaḓə/	The ear ring
/murkʰɔ/	/murkɔŋ/	/murkɔŋ/+/ḓə/	ŋ → Ø / __ ḓ	/murkɔḓə/	The dumb

5.4.0. Neutralization:
5.4.1. Absolute neutralization:
In this phonological process the segment turns into another sound in all environments. This process could happen in loan words because some phonemes from the source language do not exist in the borrowed language. To cover that weakness, those phonemes are changed by phonemes which exist in the borrowing language. All the aspirated sounds undergo this process and become unaspirated in Mising irrespective of its position of occurrence in that morpheme. This process follows as well as denies Beckman.

The process follows Beckman's theory in examples 3 and 4 where the non-initial syllable gets changed. The second similarity is shown in examples 5 and 6 where the coda position is considered as a weak position prone to change.

The process denies Beckman in examples 1 and 2 where the strong and privileged position, the onset gets changed rebelling Beckman.

In source language	Neutralization	Output	Glossary
/tʰali/	# tʰ → t	/tali/	Plate
/tʰɛla/	# tʰ → t	/tɛla/	Cart
/kɔtʰa/	tʰ→t / v__v	/kɔta/	Talk
/pɔtʰar/	tʰ→t / v__v	/pɔtar/	Field
/kɔtʰ/	tʰ→t / ___#	/kɔt/	Mat
/pɔtʰ/	tʰ→t / ___#	/pɔt/	Road

5.4.2. Partial neutralization:
The partial neutralization absolutely follows Beckman's case of Positional Faithfulness. In this process of partial neutralization the velar fricative /x/ in the final position of a word gets substituted by voiceless velar plosive /k/.

In source language	Neutralization	Output	Glossary
/xahɔx/	x→k / ___#	/xahɔk/	Bravery
/pɔlax/	x→k / ___#	/pɔlak/	Name of a tree
/nirɔx/	x→k / ___#	/nirɔk/	Tasteless
/nira:x/	x→k / ___#	/nira:k/	Disappointed

6.0. Conclusion:
This preliminary study shows the importance of the phonological processes of the language. It shows the importance of the Privilege Theory in interpreting the processes to find the exact privileged positions in the morphemes of the language and how they behave in similar and different atmospheres. The study shows some phonological processes following and some denying the Positional Faithfulness Theory proposed by Jill Beckman (1998). In this study I have shown that the original Mising words follow Beckman's Theory in the phonological processes present in the language while the borrowed words showed some disagreement with the theory.

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