



Research Paper

## Palatalization in Lotha

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**ABSTRACT:** *Palatalization may take place where a consonant changes its place features to a palatal-like, regardless of the nature of the trigger. It may also take place when a consonant acquires a secondary palatal articulation. The process of palatalization in Lotha results mainly through the interaction of consonants with front vowels, high vowels and the palatal approximant [j]. Lotha exhibits secondary palatalization when a consonant shifts its place of articulation triggered by the approximant [j] and the front vowel [i]. When palatalization takes place in front of the trigger [i], it gets neutralized thereby changing diphthongs into monophthongs.*

**KEYWORDS:** *Lotha, Palatalization, Secondary palatalization, Consonants, approximant, high vowel*

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### I. INTRODUCTION

Lotha is a generic name referring to both the linguistic group and the ethno-cultural entity. Linguistically, Lotha has been classified under the central Naga group of the Tibeto-Burman sub-branch of the Sino-Tibetan language family (Eberhard et.al, 2021). It lists a total population of 179,000 according to the Census of India, 2011. Lotha is one of the major languages spoken in Nagaland. The speakers of Lotha are scattered all over Nagaland but the majority are concentrated mainly at Wokha district of Nagaland. Lotha has no script of its own and has adopted the Roman script introduced by the British and the American Missionaries in the late 19th century. Lotha has a number of dialectal variations. However, the linguistic variation observed is mainly at the phonological level, that is, the variation in the phonological forms and the accent of the speaker. The phonological variation can be attributed to regional differences, that is, it varies from village to village. For the purpose of literary works, the variety spoken in central villages, particularly in and around Wokha town is used. The analysis in the present research paper is based on the standard variety of the Lotha language spoken in and around Wokha town.

### II. METHODOLOGY

The linguistic fieldwork methodology was employed for this research study. This includes: Informants: Primary data were collected from the native speakers of the dialect by going to the field. The informants selected include both male and female which are of different age groups. Educated as well as illiterate informants were interviewed for elicitation of data. The data collected were presented in the form of word-lists, sentence list, narratives and oral tradition. In addition, interviews with scholars and writers who have worked on Lotha are included. Number of language consultants consists of eight people, both male and female.

Tools: The tools include interviews and audio recorder. Audio recorders like Zoom H4n and field linguistic softwares like Flex were used for recording and analyzing the data.

Procedure: Data were collected from primary sources and secondary sources which include textbooks, articles, and journals for cross reference.

Presentation of data: Description and standard procedure of presenting field data were presented.

The data for analysis were collected in Wokha town, Wokha village, Yikhum village and Doyang which are the villages adjacent to Wokha town in Nagaland.

No record of previous work on palatalization in Lotha has been found till the completion of this work.

### III. PALATALIZATION IN LOTHIA

Crystal (2008:374) defines palatalization “as an articulation involving a movement of the tongue towards the hard palate”. Trask (1996:254) defines palatalization as the “phenomenon in which a segment whose primary articulation is located somewhere and is articulated with secondary articulation. It involves the raising of the front of the tongue towards the palate or (with back consonants) the movement of the constriction forward towards the palate”.

Bhat’s definition of palatalization covers cases that meet one or both of the following conditions (Bhat 1978:49): (i) The environment that induces the change must be a “palatalizing environment” (i.e. it must be a front vowel, a palatal semivowel, or a palatal or palatalized consonant) (ii) The sound that results from the change must be palatal or must have a secondary palatal articulation. Tongue-raising (essentially secondary palatalization) occurs more with apical (sounds articulated with the tip of the tongue) and labial sounds and is triggered by a following high (particularly front) vowel or semivowel. Tongue-fronting occurs more with velars and is triggered by a front vowel (not necessarily high). Spirantization may occur alone with the palatal glide and the trill *r* among others (Bhat 1978:56), and it may occur in combination with tongue-fronting and tongue-raising. Velars may be affected by fronting, raising and spirantization at the same time, resulting in *k* → *tʃ* (Bhat 1978:51).

Thus, palatalization refers to a sound change or modification that results in a palatalized articulation of a consonant or in certain situations a front vowel. It involves change in the place or manner of articulation of consonant or the fronting/raising of vowels. Bateman (2007:1) mentions that the motivation for such inclusion stems from the fact that these processes result mainly from the interaction of consonants with front vowels, high vowels, and the palatal glide *j*.

Chen (1973), Bhat (1978) and Hall (2000) all found the same common triggers.

Palatalization can be of two types: Full palatalization and Secondary palatalization. Bateman (2007:2) refers to two types of palatalization: in one case the consonant shifts its primary place and often its manner of articulation while moving toward the palatal region of the vocal tract. This shift in consonant is referred to as full palatalization, as in (1), and in the other it is co-articulated with a following palatal off glide. This type of palatalization is referred to as secondary palatalization, as in (2):

(1) Full Palatalization

*k, t* → *tʃ*  
/dɒnt ju/ → [dɒntʃju] ‘don’t you’ (English)

(2) Secondary palatalization

*t, d* → *tʲ, dʲ*  
/yamati/ → [yamatiʲ] ‘a person’ (Watjarri)

( Examples cited in Bateman (2007:2)

In addition to the above two types of palatalization, Bateman (2007:10) distinguishes between purely phonological and morpho-phonological contexts of palatalization.

According to Bateman (2007), purely phonological palatalization occurs across the board in a language, which is understood as allophony. Some examples of purely phonological palatalization cited by Bateman (2007:11) are given below:

- |       |                       |          |                     |
|-------|-----------------------|----------|---------------------|
| (i)   | /pit iko/ → [pitʃiko] | ‘small’  | (Apalai, Carib)     |
| (ii)  | /kukira/ → [kutʃiæ]   | ‘exceed’ | (Nkore-Kiga, Bantu) |
|       | /egjo/ → [edʒo]       | ‘that’   |                     |
| (iii) | /gɛbam/ → [gʲɛ bam]   | ‘pound’  | (Koromfe, Gur)      |
|       | /giram/ → [gʲiram]    | ‘judge’  |                     |

A morpho-phonological context is one where palatalization is restricted to certain morphological forms, but where it is phonologically conditioned by the presence of a common palatalizing trigger (Bateman, 2007:11). The major types of morpho-phonological palatalization are given below:

a. Triggered by affixation: affix contains palatalizing trigger

- |      |                                     |                 |                     |
|------|-------------------------------------|-----------------|---------------------|
| (i)  | /ka za / ‘hen’ → [kadʒi]            | ‘hens’          | (Hausa, Chadic)     |
|      | /mota/ ‘car’ → [mototʃi]            | ‘cars’          |                     |
| (ii) | /fak/ ‘make/do’ (1Sg 3Pl) → [fatʃe] | ‘make/do’ (3Sg) | (Standard Romanian) |

b. Either triggered by affixation with opaque trigger, or no apparent trigger but expressing morphological property:

(i) /fak-i/ → fatʃ ‘make/do’ (2 Sg) (Standard Romanian)

(ii) /brad-i/ → [braz<sup>i</sup>] ‘fir tree’

Following Bateman (2007), it is observed that Lotha exhibits the presence of secondary palatalization. Secondary palatalization in Lotha is observed (i) when a consonant shifts its place of articulation, for example, the velar stop [k] changes to a palatalized alveolar [k→tʃ] and labial [p] changes to a palatalized alveolar [p→tʃ]. In secondary palatalization, it is also seen that (ii) the simple alveolar consonant [t] becomes palatalized alveolar [t→tʃ]. As mentioned by Bateman (2007) and the claimed made by Chen (1973), Bhat (1978) and Hall (2000), similarly in Lotha, in both the cases of palatalization, the trigger is the approximant [j] and the front vowel [i].

The following are some of the illustrations showing the presence of palatalization in Lotha:

#### Secondary Palatalization: Purely Phonological Palatalization

/láŋkjú/	→	[lántʃú]	‘uphill’
/pjuŋk <sup>h</sup> án/	→	[tʃúŋk <sup>h</sup> áʔ]	‘mushroom(wild)’
/tsòk <sup>h</sup> jəŋ/	→	[tsòt <sup>h</sup> əŋ]	‘son’
/p <sup>h</sup> jòcàk/	→	[t <sup>h</sup> òcàk]	‘promise’
/à-kjò/	→	[àtʃò]	‘my grandmother’
/ò-kjò/	→	[òtʃò]	‘thorn’
/ò-pjón/	→	[òtʃóʔ]	‘beauty’
/è-pjòn/	→	[ètʃòʔ]	‘rotten’
/ò-p <sup>h</sup> jàŋ/	→	[òt <sup>h</sup> jàŋ]	‘drum’

From the above examples, it is observed that secondary palatalization is triggered by a palatal approximant [j]. There is also the shift in primary place of articulation (bilabial and velar) to alveolar, which suggests a greater effect of the palatalization trigger on the target.

In addition to the above examples, it is also observed that in Lotha, secondary palatalization is triggered by front, high vowel [i]. This is illustrated by the examples given below:-

/nítiá/	‘nothing’
/p <sup>h</sup> ántiá/	‘wake up’
/jántiò/	‘star’

In the above examples, it is seen that in the underlying forms, all the words appear to have diphthongs in their forms, for examples, /ia/ in /ntia/ ‘nothing’ and /io/ in /jantio/ ‘star’. However, when palatalization takes place, that is, when the simple alveolar stop is being palatalized, the front, high vowel [i] is being neutralized, thereby, changing the diphthongs to monophthongs. This type of palatalization occurring in Lotha can be shown in the illustrations given below:

/nítiá/	→	[nítʃá]	‘nothing’
/p <sup>h</sup> ántiá/	→	[p <sup>h</sup> ántʃá]	‘wake up’
/jántiò/	→	[jántʃó]	‘star’

In the above examples, palatalization trigger in Lotha is not maintained and gets deleted when the trigger gets absorbed into the target. The trigger gets deleted because the information contained in the trigger can be recovered from the palatalization on the consonant target. From the above examples, it is also observed that a secondarily palatalized consonant is not greatly affected by a palatalizing vocoid: the consonant maintains its primary place of articulation (alveolar), and in addition it has a secondary palatal articulation, with the tongue raised toward the palatal region (hard palate).

#### IV. CONCLUSION

Lotha undergoes a secondary palatalization when a bilabial [p] and a velar [k] changes into a palatalized alveolar triggered by an adjacent sound. The primary place of articulation which is a stop is not affected and remained the same; however the secondary place of articulation changed from bilabial to palatalized alveolar (p→tʃ) and from velar to palatalized alveolar (k→tʃ). In both the cases the trigger is an approximant [j]. Whereas, when the trigger is a high vowel [i], the place of articulation remains the same but receives a palatalized sound resulting in t→tʃ. The triggers [j] and [i] are not maintained and gets deleted when the trigger gets absorbed into the target. Following Bhat (1978:56) palatalization in Lotha involves both tongue-

raising which occurs with a labial sound and tongue-fronting which occurs with a velar sound triggered by a semi vowel.

Another observation made on palatalization in Lotha is that most of the palatalization targets are obstruents, commonly the stops sounds. From the examples discussed above, it is observed that Lotha exhibits only secondary palatalization and such palatalization occurring is purely phonological palatalization.

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