

# Sociophonetic Study of Nepali Spoken by the Magar Community in Baglung

Krishna Prasad Chalise

Assistant Professor, Central Department of English, Tribhuvan University

## ARTICLE INFO

### Corresponding Author

Krishna Prasad Chalise

### Email

[krishna.chalise@cdl.tu.edu.np](mailto:krishna.chalise@cdl.tu.edu.np)

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### Orcid

<https://orcid.org/0009-0003-1024-3436>

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## ABSTRACT

*This research is a sociophonetic study of the ethnic variety of Nepali spoken by the Magar community in Baglung as their mother tongue. It is unknown which Magar group they belong to and which Magar language their ancestral language was. Data were collected from one male and one female subject at the three research locations. For the F1×F2 plot, the vowels were recorded in the plosive-vowel-plosive environment in disyllabic words, and the pattern of sound change from the standard colloquial Nepali and the Magar variety of Nepali is based on the recorded texts from the speakers. The vowels, in this variety, are relatively neutralized than in the standard colloquial Nepali. Laryngealization of the vowels is a common phenomenon and there is a relatively lower pitch in the speech. The plosives and affricates contrast only in three places of articulation. There is a heavy plosive weakening due to spirantization, deaspiration, and deaffrication. Regular patterns of sound change from the standard colloquial Nepali to Magar Nepali can be well formulated. In comparison, we find that its sound system is highly influenced by the sound system of Magar. The features found in the speech sounds of this variety justify that it is a well-defined distinct ethnic variety of Nepali.*

**Keywords:** *Magar, ethnic variety, colloquial Nepali, sociophonetics, sound change*

## Introduction

This research carries out a sociophonetic study of the Nepali language spoken by the ethnic Magar community residing in the central and eastern part of the Baglung district who gave up their ancestral language several generations before and have been speaking Nepali as their mother tongue. Sociophonetics deals with the socially conditioned phonetic variations in speech that are related to the speaker's gender, age, or social class (Honey, 1997; Foulkes and Docherty 2006). It combines both sociolinguistic and phonetic methods, techniques,

and principles. It emerged from the view that language varies at the phonetic level as it varies in the other aspects of language. It is based on the assumption that speech variability is influenced by the social backgrounds viz. gender, age, social class, and ethnicity of the speakers (Labov, 1966; McCarthy, 2012). It studies the socially caused language variations in speech at both segmental and suprasegmental levels.

## The People and Language

It is still unknown which Magar Group they belong to and which Magar language their ancestors spoke



in the past. Grunow-Hårsta (2008, p. 6) claims that the people called Magar living in the western part of Nepal like Rukum, Rolpa, etc., and Baglung, Kaski, and Myagdi districts 'are likely not Magars proper, but are members of others ethnic groups such as the Kham or Kaike'. But Khams and Kikes call themselves Magar. Beames (1870) refers Khams to be Magars but their language was far different from the language spoken by the Magars living in Tanahun, Syangja, Palpa, and surrounding areas. As the communities call themselves Magar, it would not be appropriate to classify them as proper and improper Magars. But the term Magar is a cover term that covers distinct ethnic groups.

Morris (1933) states that any of the Magars living in the areas of Argha, Baglung, Dhurkot, Musikot, Gulmi, Khanchi, and Pyuthan do not speak Magar but they speak a dialect of Nepali whose pronunciation varies from location to location. But the interesting fact is that though they do not speak Magar, their speech has some phonetic features that are distinct from the phonetic features of the standard conversational Nepali. These phonetic features of their speech portray their speech as a distinct ethnic variety of Nepali. Probably, this variation is the result of the fact that they have retained some of the features of their ethnic/heritage language. For example, there is no phonological contrast between the dental and retroflex series of plosives in their speech as in Magar. The /d/ phoneme in Nepali in intervocalic position is consistently replaced with /r/.

### **Contact of the Magar People and Nepali Language: Past and Present**

Nepal has been a linguistic melting pot since the prehistorical period and recently the trend has become more intensive because of the heavy migration of people speaking different languages belonging to different language families, especially Indo-Aryan (Nepali), Himalayish, and Bodish (Noonan, 2003, Gautam, 2012). Beames (1870) states that Magars, like Limbus, migrated from the eastern part of Tibet before 1300 AD and resided in the eastern part of Nepal, Sikkim, and Bhutan. We can assume that during that period, they must have

been in contact with speakers of other languages. Their movement towards the West began when they came in contact with the Nepali speakers. It is not clear when they came in contact with the speakers of Nepali but it is obvious that the Nepali language was well spread over the region before the conquest of Prithvi Narayan Shaha. Hamilton (1819) states that he visited Nepal in 1802 and found that Nepali was rapidly replacing the local languages of the mountains. It means that there was a heavy language shift in the mountains of Nepal. For such a heavy shift, it needs a long span of language contact but the conquest must have catalyzed the situation. Similarly, Hodgson (1828) also found that Nepali was so widely spread in the areas west of the Kali River that it had nearly replaced the other languages. In the areas east of Kali River, as far as the Trishuli River, it was spoken almost equally with the local mother tongues. The major Magar-speaking areas are in the west of Kali Gandaki which shows that Magar came in contact with Nepali Much earlier. Beames (1870) states that Nepali was spoken even on the plain of Nepal as well as beyond Nepal in Sikkim and Bhutan. He points out that the Magar language was threatened because of three reasons. Firstly, the Magar settlements were close to the other language-speaking communities and were in regular contact with them. Secondly, most people, especially the males, were out of their homes on military service. In several cases, their wives and children went with them. Thirdly, they felt ashamed of speaking their language in the presence of the other people.

Besides the Nepali language, the Magars came in contact with the English language long ago when the British East India Company started to recruit Gorkhalis in its army where the number of Magars was remarkable. Since then, the tradition has continued till now. Similarly, their contact with Hindi also started when they started to join the Indian army.

Noonan (2003) presents the current situation of language contact in Nepal. There have been large-scale population movements within the country and out of the country. The internal movement has

created a contact situation between and among the different languages belonging to mainly two language families Indo-Aryan and Tibeto-Burman. The cities and marketplaces have become the real linguistic melting pots because of urbanization. In such situations, the population of different language-speaking people is small and they cannot use their language with other language speakers and different domains of language use. In this context, they have to use the language of wider communication and the minority languages are more likely to be lost. A vast majority of the Magar ex-armies and their families have settled into the urban areas where the possibility of using their ethnic language is very low. Moreover, the young generations have formal education where the medium of instruction is Nepali or English. Nowadays, the role of mass media and social media has become influential and the language of communication is Nepali, English, or Hindi (Gautam, 2021). In this context, the Magar communities are in more intense contact with other languages. Several of the Magar communities gave up their native language much earlier, several of them gave up later, and some of them are in the process of giving up at present.

## Methodology

### Data Collection

The data were collected from three locations in Galkot, viz., Birkot-Kandebas, Righa, and Dudalibhati within the Baglung District. One male and one female, fluent typical speakers of Magar Nepali with normal speech capacity were selected from each location. Words were collected for acoustic analysis of the vowels, and texts were recorded to identify how the speech sounds (vowels and consonants) are different in the Magar Nepali from the speech sounds in standard colloquial Nepali.

For the acoustic analysis of the vowels, the recording was made in a controlled environment in which the words consist of all the target vowels in [pVp], [bVb], [kVk], and [gVg] environments. Every word was embedded in a carrier sentence in such a way that the target word was uttered once in

isolation and next in the context. So, every word was uttered as X, I said X (where X is the target word). Every utterance was followed by a pause so that the speaker could produce each utterance with equal comfort. Recording the target words in a carrier sentence assures the production of the words in natural speech. Each word was recorded three times and the calculation was based on their average values.

The words and texts were recorded using a Sony ECM-MS908C Electret Condenser Microphone and EDIROL, R09HR audio recorder maintaining a distance of 5-6 inches between the microphone and the mouth of the speaker in waveform files with 44000 Hz audio sample rate, 1411-bit rate, and 24-bit resolution.

### Data Analysis

The recorded data were edited using Audacity, an audio editing software, and were analyzed using PRAAT version 6.3.09, a sophisticated and widely used software for acoustic analysis. Oscillogram, FFT spectrum, and spectrogram of the sounds were utilized as the analytic techniques, as recommended by Ladefoged (2003). Five formants were measured within the frequency range of 0-5000 Hz for the male speakers and 0-5500 Hz for the female speakers, and the window length was set at 0.0043s. For formant analysis, a formant window length of 0.020s was set. Fundamental frequency (F0) contours were extracted using the very accurate auto-correlated method. The frequency range for F0 analysis was set at 50-200 Hz for the male speakers and 150-300 Hz for the female speakers. The formant frequencies and the fundamental frequencies were calculated manually from the wideband spectrogram selecting a 50 ms portion from the steady state part (where there is minimal effect of the adjacent sound segments) of the vowel. The FFT spectrum and the LPC spectrum were used where necessary. The F1 and F2 values were plotted into the F1×F2 plane using Thomas and Kendall (2007) and PRAAT. The acoustic data for colloquial standard Nepali has been taken from Chalise (2022).

## Results

### The Positions of Vowels in Acoustic Vowel Space

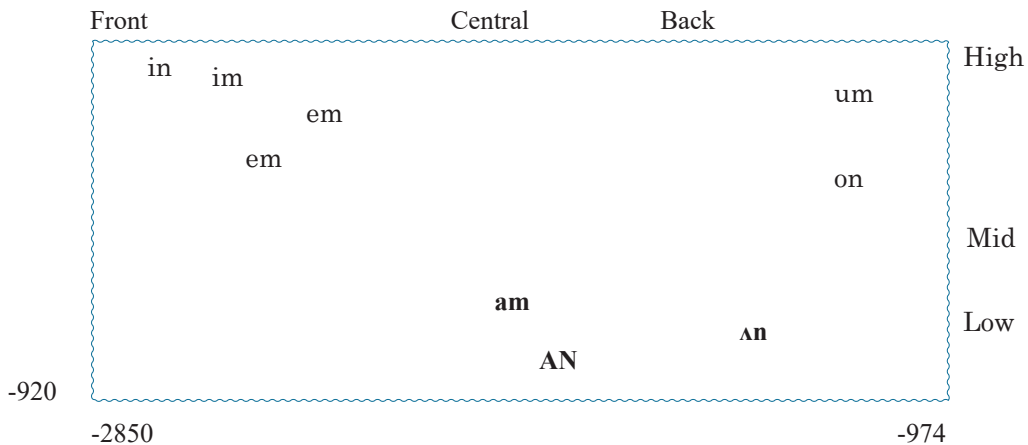
Previous studies have identified six basic vowel phonemes /i/, /e/, /ʌ/, /a/, /o/, and /u/ in Magar Dhut (Beames, 1970; Grunow-Hårsta, 2008) and Magar Kham (Watters, 2002) which are similar to the basic vowels of Nepali. This study identifies that the basic vowels in Magar Nepali are similar to the basic vowels of standard colloquial Nepali. Figure 1 presents the vowels in standard colloquial Nepali and Magar Nepali in the vowel space. The vowels paired with -n are standard colloquial Nepali vowels and those paired with -m are the Magar Nepali vowels. For example, ‘in’ is the [i] vowel in standard colloquial Nepali, and ‘im’ is the

[i] vowel in the Magar Nepali. To describe them, [i] and [u] are high, [e] and [o] are mid, and [ʌ] and [a] are low vowels. Likewise, [i] and [e] are front, [a] is central, and [ʌ], [o] and [a] are back vowels. Similarly, [u] and [o] are rounded and the rest are unrounded.

In minute observation, some differences can be identified regarding the positions of the vowels in the varieties. [u] and [o] have almost the same position in both varieties. The vowels /i/ and /e/ are shifted towards the center; /a/ and /ʌ/ are raised in the Magar Nepali variety. It portrays that the vowels in the Magar Nepali variety are relatively neutralized or are less peripheral.

**Figure 1**

*The Vowels in Standard Nepali and Magar Nepali compared*

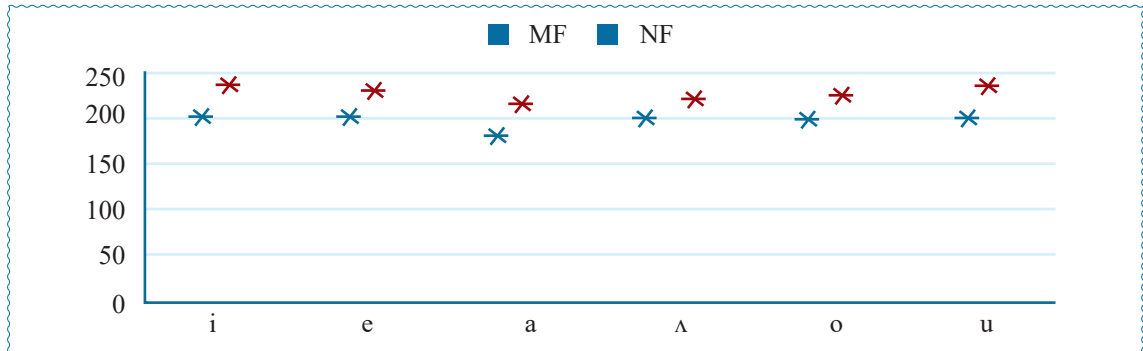


The recorded audio data show that the vowels in the Magar Nepali are slightly laryngealized. There is a higher degree of laryngealization at the beginning of a vowel. If the vowel is produced longer, there is laryngealization in the later part of the vowel, too. Because of the laryngealization, the F0 is lower in the Magar Nepali than in the standard colloquial Nepali. The vowels were recorded from two Magar females, and the F0 values for the standard

colloquial Nepali vowels were taken from Chalise (2022) which were measured from the recorded words from two Brahmin females in the same phonetic environments and measured under the same parameters. The results show that the F0 in the Magar Nepali variety is lower by nearly 20-30 Hz than the F0 in the standard colloquial Nepali as presented in Figure 2.

**Figure 2**

*The Positions of the Basic Vowels in the Varieties Compared*



Note. MF = Magar Nepali and NF = standard colloquial Nepali-speaking female

**The Patterns of Vowel Change**

In definite phonetic environments, the vowels in standard colloquial Nepali are changed in regular patterns in Magar Nepali. The patterns are presented with comparisons and illustrations.

- a. The vowel /ʌ/ is changed into [o] or [u] if it is immediately preceded by a bilabial consonant as presented in (1).

(1) Standard Colloquial Nepali	Magar Nepali	
mʌkʌi	mokʌi	‘maize’
bʰʌĩsi	bʰuĩsi	‘she buffalo’
bʰʌrnu	bʰornu	‘to measure’
bʌini	buini	‘sister’
ʌbʌ	abo	‘now’
pʌni	puni	‘also’

**The Patterns of Vowel Change**

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- a. The vowel /ʌ/ is changed into [o] or [u] if it is immediately preceded by a bilabial consonant as presented in (1).

2. Standard Colloquial Nepali	Magar Nepali	
kala mantsʰe	kalo mantsʰe	‘dark men’
lama kan	lamo kan	‘long ears’
baʃama	baʃowã	‘on the road’
ʒokale	ʒokole	‘with the bamboo basket’
ʒinkaʒin	dinkodin	‘everyday’

- c. The vowel /e/ in the inferential construction [  $\Sigma$ -e-tsʌ/tsʰʌ ‘-INF-BE.3S. NH’] and negative construction is changed into [i]. This change is found with any person or number subject noun as presented in (3).

(3) Standard Colloquial Nepali	Magar Nepali	
k <sup>h</sup> aetsΛ/k <sup>h</sup> aets <sup>h</sup> Λ	k <sup>h</sup> aitsΛ	‘has eaten’
aetsΛ/aets <sup>h</sup> Λ	aitsΛ	‘has come’
gΛetsΛn/gΛets <sup>h</sup> Λn	gΛitsΛn	‘has come’
gΛenΛ	gΛinΛ	‘did not go’
b <sup>h</sup> ΛenΛ	b <sup>h</sup> ΛinΛ	‘did not become’

d. The conjunctive participle marker {-erΛ} is changed into {-irΛ} as presented in (4).

(4) Standard Colloquial Nepali	Magar Nepali	
k <sup>h</sup> aerΛ	k <sup>h</sup> airΛ	‘after eating’
aerΛ	airΛ	‘after coming’
gΛerΛ	gΛirΛ	‘after going’
b <sup>h</sup> ΛerΛ	b <sup>h</sup> ΛirΛ	‘after becoming’

Some speakers simply drop /e/ instead if the verb stem ends with a vowel. In this context, compensatory lengthening of the final vowel of the verb stem shows the trace of vowel drop as presented in (5).

(5) Standard Colloquial Nepali	Magar Nepali	
k <sup>h</sup> aerΛ	k <sup>h</sup> a:rΛ	‘after eating’
aerΛ	a:rΛ	‘after coming’
gΛerΛ	gΛ:rΛ	‘after going’
b <sup>h</sup> ΛerΛ	b <sup>h</sup> Λ:rΛ	‘after becoming’

e. The plural marker {-hΛru} shows a peculiar character in this variety of Nepali. It has three forms [-ur], [Λru], and [huri]. If the noun stem ends with a vowel, the form [-ur] is used, and if it ends with a consonant, the form [Λru] is used. The form [huri] or [uri] can be used in both situations. The illustrations are presented in (6).

(6) Standard Colloquial Nepali	Magar Nepali	
ketahΛru	ketaru/ ketahuri	‘the boys’
g <sup>h</sup> ΛrhΛru	g <sup>h</sup> ΛrΛru/ g <sup>h</sup> Λrhuri	‘the houses’
mants <sup>h</sup> ehΛru	mants <sup>h</sup> eru/ mants <sup>h</sup> ehuri	‘people’
kiṭaphΛru	kiṭapΛru/ kiṭaphuri	‘books’

f. The past participle marker {-eko} and {-eka} are changed into [ja] as presented in (7).

(7) Local Nepali	Magar Nepali	
gΛrḍeko	gΛrdja	‘done’
k <sup>h</sup> aiḍeka	k <sup>h</sup> aidja	‘eaten’

- g. The past plural existential be verb {tʰje} is changed into [tʰja] as presented in (8).
- (8) Standard Colloquial Nepali      Magar Nepali  
 gaɽdʒa tʰe                              gaɽdʒa tja                              ‘had done’  
 bʰaɽdʒa tʰe                              bʰaɽdʒa tʰja                              ‘had said’

### The Consonants and the Patterns of Consonant Change

The changes in the six classes of consonants are described below.

#### a. The plosives

This variety is characterized by a higher degree of plosive weakening as a result of siphonization and deaspiration. As a result, the fricative and deaspirated allophones of the plosives are much more frequent. Although standard colloquial Nepali has plosive weakening, the process is much more robust in the Magar Nepali variety.

The dental and retroflex series of plosives are in free variation with their counterparts but the retroflex production is far more frequent than the dental production. Watters (2002), for Kham Magar, presents only one place of articulation, ‘alveolar’ but Gurmo-Hårsta (2008), for Magar, presents two distinct places of articulation, lamino-dental and apico-alveolar. The situation of free variation between these two production locations suggests that phonologically, there should be only one place of articulation. It would probably be better to call it alveolar sound as Watters (2002) recommended.

In the word-initial position, the voiceless unaspirated plosives are produced as they are phonetically described. In the intervocalic position, /p/ is likely to be produced [ɸ], and /k/ is mostly produced [x]. The phonemes /t/ and /tʰ/ are freely produced as [t] or [tʰ] and they are not fricative in the intervocalic position.

The voiced unaspirated plosives have allophonic variations in different phonetic environments. The plosive /b/ has allophones

[β], [β̥], and [w] in the intervocalic position and sometimes in the word-initial position. The plosive /d/ has allophones [ɽ], [ɽ̥], and [r] in the intervocalic position. Similarly, /g/ has allophones [ɣ] and [w] in intervocalic position.

The voiced aspirated plosives are less commonly produced voiced aspirated. The vowel following them is heavily breathy in the initial part and sometimes the entire vowel. /bʰ/ has other allophones [b] and [β], too. Similarly, /dʰ/ and /gʰ/ are in free variation, and in the intervocalic position, they are generally deaspirated. Likewise, /gʰ/ has other allophones [g], [ɣ] and [w]. The degree of plosive weakening is remarkably higher in the Magar Nepali variety than in the standard colloquial Nepali.

#### b. The fricatives

The phoneme /s/ is pronounced as it is pronounced in standard colloquial Nepali but in some instances, it is voiced [z] in the intervocalic position. There is no remarkable variation in its production in both of the varieties.

In the word-initial position, /h/ begins with a short voiceless part and enters into the vowel part causing the vowel breathy. In the intervocalic position, breathiness in the vowel gives the trace of its existence and in some cases, it is completely absent. It is more or less similar to the Magar Nepali variety and the standard colloquial Nepali, but the Magar Nepali has a looser configuration.

#### c. The affricates

The voiceless affricates /ts/, /tsʰ/, and /dz/ are realized in the word-initial position. In

the intervocalic position, /ts/ is sometimes realized as [t] and [s], too. The phoneme /ts<sup>h</sup>/ is, most frequently, realized as [ts] and [x], and /dz/ is realized as [z]. The voiced aspirated one, /dz<sup>h</sup>/ is not realized in any position. In the word-initial position, it is mostly realized as [z], and in the intervocalic position, it is realized as [z]. It shows that their basic system does not include the voiced aspirated affricate.

**d. The nasals, liquids, and glides**

The classes of sonorant consonants, viz., nasals, liquids, and glides do not go under the process of sound change in the Magar Nepali variety.

**Discussion and Conclusion**

I compared the Nepali variety spoken by the Magar community in Baglung with the standard colloquial Nepali variety. The comparison shows that the variety spoken by the Magar community has several idiosyncratic phonetic features. However, the number of the basic vowels is the same in both varieties, the positions of the vowels in the acoustic vowel space clearly show that the vowels in the Magar Nepali variety are relatively centralized or neutralized than the vowels in the standard colloquial Nepali. The F0 of the vowels in the Magar Nepali variety is lower than the F0 of the vowels in standard colloquial Nepali. It is because laryngealization is a common property of the vowels in this variety which is not found in the Nepali spoken by the Brahmin/Kshatri community. The Magar variety shows that the plosives contrast in only three places of articulation as in Magar Kham as found by Watters (2002). Gurno-Hårsta (2008) finds plosive contrast in four places of articulation in the Tanahun variety of Magar and three places of articulation in the Syangja variety of Magar. This variety follows the pattern of Magar and Kham Magar regarding the places of articulation of plosives. Similarly, the use of voiced aspirated plosives and affricates is limited and restricted only in the word-initial position. It

is the result of the absence of the class in Magar. Watters (2002) states that there are no voiced aspirated plosives in Kham Magar and Gurno-Hårsta (2008) states that their distribution is restricted in the word-initial position. The system of plosive sounds justifies that the sound system of the Magar Nepali variety is the reflection of the Magar sound system. The other classes of consonants do not seem significantly distinct from the corresponding systems in the variety spoken by the Brahmin/Kshatri community. The classes of sonorant consonants do not go under the process of sound change because the classes are the same in the standard colloquial Nepali and the Magar languages, Magar Dhut and Magar Kham.

Ethnicity is a significant factor that can determine the correlation between a speech community and language variety. Mesthrie et al. (2009) explain that ethnic minorities often reflect the broad societal tendencies regarding language features to some extent although they may also exhibit notable distinctions. Such an ethnically defined language variety is called ethnic dialect or ethnolect of the language. Labov (1972) identified Puerto Rican English in New York only based on consonant cluster simplification. The Magar variety studied in this paper depicts a large number of phonetic and phonological features different from the standard colloquial Nepali. Based on the well-defined distinct features it is justified that the Magar variety of Nepali is a distinct ethnolect of Nepali.

The factor for retaining an ethnolect is the realization of identity based on ancestry, religion, and culture. The sense of identity regarding this variety is ancestry. The phonology of this variety is closer to the phonology of the Magar and Kham Magar languages. It shows that they gave up their ethnic language several generations before but they have retained the phonology. The retention is the result of a greater degree of interaction within the community because the Magar settlements in the areas are almost homogenous. This indicates the future possibility of various aspects of shifting languages.



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