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# Phonological variation and linguistic diversity in Bangladeshi dialects: An exploration of sound patterns and sociolinguistic significance

Mohammad Mustafizur Rahman<sup>1</sup>, Binoy Barman<sup>1</sup>, Liza Sharmin<sup>1</sup>, Md. Rafiz Uddin<sup>1</sup>, Sakiba Binte Yusuf<sup>2</sup>, Ushba Rasool<sup>2,\*</sup>

<sup>1</sup> Department of English, Daffodil International University, Dhaka 1216, Bangladesh

<sup>2</sup> School of Foreign Languages, Zhengzhou University, Zhengzhou 450001, China

\* Corresponding author: Ushba Rasool, [ushba.rasool@gmail.com](mailto:ushba.rasool@gmail.com)

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**Abstract:** This paper explores how people in different parts of Bangladesh talk differently from each other. The study pays special attention to the unique sounds in their dialects compared to the standard Bangla language. The main goal of the research is to understand why these sounds change from one dialect to another. The researchers collected data from 70 participants coming from 20 regions of Bangladesh, who were fluent in their regional dialects and studied it carefully. By employing semi-structured interviews, IPA transcription, and thorough verification processes, this study ensures the accuracy and reliability of its findings and discussion, contributing valuable insights into the phonological diversity of Bangladeshi dialects and their socio-linguistic significance. The authors found 13 phonological variations or patterns among the dialects of different regions of Bangladesh. Each type of change is explained with clear examples to make it easier to understand. The research contributes significantly to the understanding of socio-linguistic diversity in Bangladesh by providing experimental evidence of phonological variation and its determinants. It also lays the groundwork for future research on dialects and their relationship with the standard language. This study will bring up a greater appreciation for Bangladesh's linguistic diversity and encourage further research into language variation and change.

**Keywords:** phonological variation; linguistic diversity; Bangladeshi dialects; sound patterns; sociolinguistic significance

## 1. Introduction

In exploring linguistic diversity within Bangladesh, Alam (2023) provides a foundational perspective, noting the wide varieties of dialectal variations across the country's different regions. The researchers mark that each region contributes to a much more complex and subtle linguistic landscape. This complexity is further elucidated by Hassan (2021), who argues that the reality of linguistic variation in Bangladesh defies simple categorization, revealing instances where several regions share phonological features or a single region encompasses multiple dialects. Faria et al. (2023) outlined that the significance of phonological variation extends beyond vocabulary differences to embrace pronunciation and intonation, distinguishing regional dialects from the standard Bangla language. This variation is not merely incidental but reflects more profound linguistic evolution and diversity patterns. Rahman (2018) supports this view, emphasizing the need for a systematic analysis of phonological differences to understand the broader sociolinguistic dynamics in Bangladesh. Habib (2012) highlights the challenges and opportunities presented by phonological variation, suggesting that a detailed examination of pronunciation

differences offers insights into the linguistic identity of various communities. This point is further developed by McCarthy and de Leeuw (2022) who examine intonation patterns across Bangladeshi dialects, revealing the potential of phonological analysis to uncover underlying linguistic structures.

Ahmed (2022) calls attention to the rich linguistic heritage of Bangladesh, advocating for an approach that integrates the study of phonological variation with broader sociolinguistic inquiries. This approach is mirrored in the work of Sultana (2018), who explores the impact of phonological variations on dialectal identity, highlighting the role of phonology in shaping regional linguistic identities. Panda et al. (2020) employ a corpus-based study to investigate phonemic variations across Bangladeshi dialects, offering a methodological blueprint for capturing the diversity of phonological patterns. Kendall et al. (2023) complement this approach by examining the socio-phonetic aspects of phonological variations, providing a comprehensive framework for understanding the interplay between social factors and linguistic change. Together, these works form the academic background upon which this research is built.

Several regions may share a single dialect and several dialects within the boundary of a single district (Van, 2020). The dialects are distinct in terms of vocabulary and pronunciation (including intonation). Many words are common in standard Bangla and dialects, though they may be pronounced slightly differently. It is interesting to notice how the pronunciation of a word in a dialect differs from that in the standard Bangla (Abedin, 2011). If researchers analyze the differences, they will discover a regularity tantamount to a 'pattern'. By engaging with the findings and methodologies of esteemed Bangladeshi scholars, this study aims to dig deeper into the patterns of phonological variation that define the dialects of Bangladesh. The goal is not only to map these variations but also to understand their implications for the linguistic landscape of the country, contributing to a broader comprehension of language variation and change.

### **1.1. Statement of the problem**

The linguistic landscape of Bangladesh is characterized by a rich variety of dialects, each possessing distinct phonological features that contribute to the country's linguistic diversity. However, the nature of phonological variation across these dialects remains underexplored, demanding a systematic investigation into the sound patterns present in Bangladeshi dialects and their sociolinguistic significance. By exploring the primary phonological differences between Bangladeshi dialects and the standard Bangla language, alongside how these variations are visible across different regions of Bangladesh, this study seeks to shed light on the sociolinguistic factors influencing phonological diversity observed in Bangladeshi dialects. Additionally, the research aims to uncover the implications these phonological variations have for language identity and communication within Bangladeshi society.

### **1.2. Significance of the study**

The study of phonological variation in Bangladeshi dialects holds great significance, particularly concerning its implications for sound patterns and

sociolinguistic dynamics. By meticulously examining how sounds diverge across dialects, this research provides crucial insights into the complex linguistic variety of Bangladesh. Such exploration emphasizes the particular phonetic complexities that distinguish one dialect from another, contributing to a deeper understanding of linguistic diversity within the country. Importantly, this investigation quarries into the sociolinguistic implications of phonological variation, demonstrating how language use reflects and shapes social identities, regional affiliations, and cultural heritage. Through the lens of sound patterns, this study illuminates the profound sociocultural significance rooted in language, highlighting the role of phonological diversity in preserving and maintaining cultural identity. Furthermore, by documenting and analyzing sound patterns within the sociolinguistic context, this study contributes to the broader academic discourse on language variation and change within Bangladesh. Ultimately, the careful examination of phonological variation in Bangladeshi dialects not only enhances readers' understanding of sound patterns but also affirms the critical role of language in shaping social dynamics and cultural identity, emphasizing the imperative of preserving linguistic diversity as a foundation of cultural heritage.

## **2. Literature review**

Phonological variation, which encompasses differences in pronunciation, intonation, and stress patterns within languages or dialects, plays a crucial role in the comprehensive analysis of linguistic diversity and the evolution of language (Chambers and Trudgill, 1998). The exploration of dialectal variation, a specific aspect of phonological variation, provides insights into how languages change over time, the impact of social factors on language, and efforts to preserve linguistic heritage (Shamim, 2021).

### **2.1. Key concepts and the role of phonological variation in linguistic diversity**

The key concept of phonological variation encompasses the subtle changes in how sounds (phonemes) are pronounced in different contexts or by different speakers. These variations can include differences in vowel sounds, the rhythm of speech, and how consonants are pronounced (Labov, 2006). Phonological variation is a driving force behind linguistic diversity, contributing to the rich tapestry of dialects and languages. It reflects and reinforces social, geographical, and historical distinctions among speakers (Chambers, 2009). This variation isn't just about accents; it's about how these differences in pronunciation can influence identity and social belonging. It plays a crucial role in how we perceive ourselves and others, often signaling our regional or social background (Eckert, 2012). By studying these variations, linguists can uncover the intricate rules that govern how sounds change in different contexts and how these changes contribute to the broader linguistic landscape, enriching our understanding of human language and communication.

## **2.2. The role and significance of socio-linguistic factors in phonological variation**

Socioeconomic status can influence speech patterns, with variations often signaling an individual's social class. Higher socioeconomic groups might lean towards a 'prestige dialect' that aligns closely with the standard language, while working-class speech might exhibit more localized dialect features (Labov, 1972). Ethnic background often correlates with specific linguistic features, including phonology. In multilingual and multiethnic societies like Bangladesh, ethnic groups might maintain distinct phonological characteristics as a marker of identity, even while speaking a common language (Milroy and Milroy, 1985). The level of formal education impacts phonological variation, with higher education levels often correlating with speech patterns that unite more closely to the standard language. Educational institutions serve as centers for linguistic normalization, where 'educated speech' forms are propagated (Bourdieu, 1991). Awal (2023) contributed by examining phonological variation and change in Bangladeshi Bengali, offering insights into how regional dialects evolve and diverge from the standard language varieties. That research underscores the dynamic nature of phonological features, influenced by social, geographical, and linguistic factors by Serajuddin (2023). Studies by Maniruzzaman (2006) on the phonological variations across the dialects of Bangladesh have identified regional patterns and influences, emphasizing the role of geographical separation and social interaction in developing dialectal diversity. In the study by Rahman (2020), a seminal work on the dialects of Bangladesh, provided a comprehensive overview of the country's dialectal diversity, laying the foundation for future phonological studies in the region. By cataloging the various phonological features across different dialects, Rahman's research has been pivotal in highlighting the rich linguistic heritage of Bangladesh and the importance of preserving its diverse dialects.

## **2.3. Linguistic diversity and dialectology in Bangladesh**

Khalid (2022) broke new ground with his comprehensive study of the dialects of Bangladesh, offering the first extensive mapping of the country's dialectal landscape. His work shed light on the varied linguistic features across different regions, setting the stage for future research in the field. This foundational study not only cataloged the diversity of dialects but also emphasized the importance of understanding regional linguistic variations for a deeper insight into the sociolinguistic fabric of Bangladesh. Studies by Alam et al. (2023) further expanded knowledge by conducting a detailed analysis of phonological variations across Bangladesh, identifying specific regional patterns and the influences behind them. Their work highlighted how geographical, social, and historical factors contribute to the phonological characteristics of different dialects, enriching the understanding of Bangladesh's linguistic diversity. Gope (2018) examined the tonal variations in the Sylheti dialect, revealing how these phonological features differentiate it from other dialects and even Standard Bengali. Such studies underscore the complex interplay of language and identity within the region, showcasing the dialects as living embodiments of Bangladesh's rich cultural mosaic (Simpson, 2007). Moreover, the

work of Satyanath (2023) on phonological variation and change in Bangladeshi Bengali offered insights into the dynamic nature of dialect evolution, influenced by factors such as urbanization, migration, and contact with other languages. The dialectology of Bangladesh, thus, represents a vibrant field of study that encompasses not just the static mapping of linguistic features but also the dynamic processes that shape these features over time. From Moniruzzaman's (2009) foundational work to the detailed analyses by Alam et al. (2023), research in this area continues to unveil the complexities of dialectal variation and its implications for understanding Bangladesh's linguistic, cultural, and social identity.

#### **2.4. Phonological features in Bangladeshi dialects**

Barua (2020) has been instrumental in highlighting the unique phonological distinctions in Sylheti and Chittagonian dialects, particularly their use of tonal variations, which sets them apart from Standard Bengali. This research offers a window into the complex linguistic landscape of Bangladesh, where tonal features play a crucial role in differentiating dialects (Uddin and Monjur, 2015). Tonal languages, where pitch or tone can change the meaning of a word, are relatively rare in the Indo-Aryan language family, making Sylheti and Chittagonian particularly interesting subjects of study. In an investigation by Riddiford (2013), retroflex consonants are another phonological feature that varies significantly among Bangladeshi dialects. Studies have shown that the presence and distribution of these sounds can vary significantly from one dialect to another, contributing to the phonological diversity within the country (Mayr et al., 2021). Variations in vowel quality and quantity are also prominent across different Bangladeshi dialects. Alam (2023) conducted extensive analyses of these variations, identifying how they contribute to the distinct phonological profiles of regional dialects. Moreover, the work by Hasan (2021) argues that preserving dialectal diversity is crucial for maintaining Bangladesh's linguistic heritage, and phonological features are key aspects of this diversity.

#### **2.5. Recent studies and findings on phonological variation in Bangladesh**

The exploration of recent studies and findings in the context of phonological variation in Bangladesh reveals a meticulous understanding of how socio-economic factors impact linguistic diversity. Research has uncovered the complexities of phonological variation in Bangladesh. Kakon (2007) examined the impact of socioeconomic factors on dialect variation, revealing how urbanization and mobility influence linguistic changes. Moreover, studies by Bangladeshi authors such as Shamim (2021) have focused on the preservation of minority dialects and their phonological features, highlighting the importance of linguistic diversity. This discussion will expand on these themes, drawing on the latest research to illustrate the dynamic interplay between language change and societal influences. Basu and Amin (2000) provide an insightful analysis of how socioeconomic factors, such as urbanization and mobility, significantly influence dialect variation and linguistic changes in Bangladesh. Their study underscores the transformative impact of these factors on language, demonstrating that as people move and cities grow, how

communities use language also evolves. This research highlights the fluid nature of language, adapting and changing in response to shifting societal patterns. Brown and Ganguly (2003) focus on preserving minority dialects and their unique phonological features, emphasizing the importance of safeguarding linguistic diversity. By examining the challenges and prospects for maintaining dialectal diversity, Basu and Amin's (2000) work contributes to a broader understanding of the value of linguistic heritage and the need for concerted efforts to document and preserve these linguistic treasures.

Further contributions to the field come from studies that goes deep into the specifics of phonological variation across different regions of Bangladesh. For instance, Rahman (2023) researched regional phonological patterns extensively, identifying distinctive features that set apart various dialects within the country. The findings deepen our understanding of linguistic variation and highlight the complex influences of geography and social interaction on language. The work by Rahman and Chowdhury (2018) explores the effects of globalization on dialects in Bangladesh, offering a perspective on how global cultural and economic forces contribute to linguistic change. These recent studies and findings emphasize the varied nature of phonological variation in Bangladesh, influenced by socio-economic factors, urbanization, globalization, and conscious efforts towards preservation. The research demonstrates that understanding these variations requires a linguistic analysis and a consideration of the social, economic, and cultural contexts that drive language change. As research continues, it is imperative to address the existing gaps and explore new methodologies to preserve and understand the linguistic heritage of Bangladesh.

## **2.6. Research gap**

Finding out what readers don't yet know about how sounds differ in the languages spoken in Bangladesh points to ways to learn more about the area's wide variety of languages. Even though a lot of work has already been done to understand how people speak differently across Bangladesh, there are still many places and sounds researchers haven't studied much. Some areas, especially those that are hard to get to, might have unique speaking methods that could teach readers more about the Bengali language and its development. Researchers also haven't studied much about how these changes happen over time in the same communities, which could help readers see how languages evolve. Another thing researchers haven't explored enough is how people speak, which connects to their social identity and place in society. In short, to fill in these gaps, researchers need to use many different kinds of knowledge and tools, from linguistics to social science. This could help readers understand not just the languages of Bangladesh better but also how languages change and grow over time everywhere.

## **2.7. Theoretical framework**

This research employs two key theoretical frameworks to analyze phonological variations in Bangladeshi dialects. The study of phonological variation in Bangladeshi dialects can be enriched by applying established linguistic theories,

which provide a structured framework for analysis. Two such influential theories are the Neogrammarian Hypothesis and Natural Phonology. These frameworks offer different perspectives on the nature of phonological change and variation, each contributing valuable insights into the linguistic phenomena observed in Bangladeshi dialects.

The Neogrammarian Hypothesis, originating in the late 19th century, posits that phonological changes occur systematically and are exceptionless within a speech community, barring any morphological influences (Labov, 1994). This theory emphasizes the regularity of sound changes and their predictability across a linguistic community. Applying this framework to Bangladeshi dialects involves examining the extent to which phonological changes in these dialects adhere to systematic patterns that can be predicted based on the Neogrammarian principles. For instance, the consistent alteration of specific phonemes in a dialectal variation can be analyzed through the lens of this hypothesis to understand the underlying regularities and the factors contributing to their exceptionless application (Chambers and Trudgill, 1998).

Natural Phonology, proposed by Stampe (1979), suggests that phonological processes are governed by natural, innate patterns of human speech production and perception. According to this theory, deviations from these natural patterns (i.e., “phonological processes”) are due to language-specific constraints that prevent the natural tendencies of speech from being fully realized. When studying Bangladeshi dialects, Natural Phonology can be utilized to explore how the phonological variations observed in these dialects might reflect universal natural processes constrained by the specific linguistic context of Bangla. For example, the occurrence of vowel harmony, assimilation, or consonant cluster simplification in certain dialects can be analyzed to determine whether these phenomena align with the natural processes posited by this theory (Donegan and Stampe, 2004).

## **2.8. Applicability to Bangladeshi dialects**

Both the Neogrammarian Hypothesis and Natural Phonology offer valuable frameworks for analyzing phonological variation in Bangladeshi dialects. By applying the systematic change perspective of the Neogrammarian approach, researchers can investigate the regularity and predictability of sound changes across different dialects. Conversely, Natural Phonology’s emphasis on innate phonological processes provides a lens through which the natural tendencies and constraints in these dialects can be examined. The integration of these theories into the study of Bangladeshi dialects not only facilitates a deeper understanding of the phonological phenomena but also contributes to the broader linguistic theories by providing empirical data from a less commonly studied language context.

## **2.9. Objectives of the study**

To better understand the phonological variations in Bangladeshi dialects, the objectives of the study are as follows:

- 1) To investigate the consistency and regularity of sound changes across different dialects, following the Neogrammarian Hypothesis.

- 2) To explore how phonetic and phonological processes, as outlined in Natural Phonology, contribute to the emergence of distinct sound patterns in Bangladeshi dialects.
- 3) To identify the primary phonological differences between Bangladeshi dialects and the standard Bangla language.
- 4) To examine the sociolinguistic factors influencing phonological diversity in Bangladeshi speech communities.

### **2.10. Research questions**

The research questions are:

- 1) Do sounds change in Bangladeshi dialects in predictable ways, as suggested by the Neogrammarian Hypothesis?
- 2) Why do different sounds emerge in Bangladeshi dialects, according to Natural Phonology?
- 3) How do social factors affect the different sounds people use in Bangladeshi dialects, and what does this mean for how they speak and understand each other?

## **3. Methodology**

### **3.1. Design of the study**

This methodology section outlines the comprehensive approach taken to collect and analyze phonological variations across 20 regions of Bangladesh. By employing semi-structured interviews, meticulous transcription, and thorough verification processes, this study ensures the accuracy and reliability of its findings, contributing valuable insights into the phonological diversity of Bangladeshi dialects and their socio-linguistic significance.

### **3.2. Instruments**

The instrumentation for this study was meticulously designed to ensure the collection of high-quality phonological data from a diverse range of Bangladeshi dialects. The primary instrument for data collection in this study was a semi-structured interview protocol, designed to extract specific phonological variations from participants. The instrument comprised several key components to ensure the collection of accurate and relevant linguistic data.

### **3.3. Procedure**

The procedure involved a meticulous approach to collect and analyze phonological variations across 20 regions of Bangladesh. Semi-structured interviews were conducted with 70 participants, selected from diverse regions and fluent in their local dialects. A structured word list and detailed interview guide were utilized to elicit specific phonological patterns. Data collection was followed by immediate transcription using the 'Praat' software, ensuring accuracy. Interviews were conducted by trained linguists to minimize bias. Verification was carried out by a separate team of linguists to ensure reliability.

### **3.4. Participants**

The study selected participants coming from 20 distinct regions across Bangladesh who were pursuing their tertiary education at Daffodil International University, Dhaka, Bangladesh, ensuring a comprehensive representation of the country's linguistic diversity. From each region, 3 to 4 individuals were selected, totaling approximately 70 participants. The selection criteria included a native residency in the region, fluency in the local dialect, and a diverse range of ages from 18 to 25 to outline generational phonological variation. Both male and female participants were interviewed.

### **3.5. Data collection**

Semi-structured interviews were conducted as the primary method of data collection. The interview questions are added in the Appendix. These interviews were designed to elicit specific phonological patterns through the use of a standardized set of words known to exhibit regional phonological variation. Each participant was asked to pronounce the same set of words in their dialect. The Data collected from the participants were immediately transcribed in written form to ensure the accuracy of phonetic transcription and subsequent analysis. For the transcription, the study employed software called 'Praat', which facilitates phonetic transcription and allows for the accurate representation of sounds using the International Phonetic Alphabet (IPA).

### **3.6. Geographical information**

The data were collected from the students coming from the following regions- Noakhali, Chittagong, Bagherhat, Sulhet, Chapainawabgonj, Rajshahi, Dinajpur, Old Dhaka, Narayangonj, Comilla, Bramhanbaria, Barishal, Gazipur, Mymensing, Chadpu, Khulna, Manikganj, Tangail, Gazipur, Rangpur, Madaripur and Adjacent areas of Bangladesh.

### **3.7. Data analysis**

In total, 13 distinct phonological patterns were identified across the collected data. The transcribed data were systematically organized into tables, which displayed the words, their standard pronunciation in Bangladeshi Bengali, the regional variations observed, and the meanings of the words. This tabular arrangement facilitated a clear comparison of phonological patterns across different regions.

#### **Analysis of the patterns**

In analyzing phonological variations in Bangladeshi dialects, this research draws upon two theoretical frameworks: the Neogrammarian Hypothesis and Natural Phonology. Through the application of these theoretical frameworks, this research aims to deepen our understanding of phonological variation in Bangladeshi dialects. By shedding light on the underlying mechanisms and sociolinguistic factors shaping linguistic diversity in the region, this analysis contributes to a more comprehensive understanding of the intricacies of language variation and evolution within Bangladeshi society.

Pattern 1:

Voiceless bilabial plosive to glottal fricative: /p/ → /h/ প → হ

In this pattern, /p/ becomes /h/ regularly in the districts of Noakhali, Feni, Lakkhipur, and adjacent areas. Here, a bilabial plosive consonant is transformed into a glottal fricative, (see **Table 1**). Apart from the initial ‘p’ sound change, ‘t’, has become ‘d’, and ‘ch’ and ‘chh’ have become ‘s’. In all the examples, /p/ → /h/ occurs in the initial position of words, but /t/ → /d/, /tʃ/ → /s/, /tʃʰ/ → /s/, these changes have occurred in the middle positions of words.

**Table 1.** Voiceless bilabial plosive to glottal fricative.

Word in standard Bangla	Phonetic transcription	Word in dialect	Phonetic transcription	Meaning of word
pani	/pani/	hani	/hani/	Water
pitano	/pitano/	hidano	/hidano/	To beat
pagol	/pagol/	hagol	/hagol/	Mad
porishkar	/poriʃkar/	horishkar	/horiʃkar/	Clean
paka	/paka/	haka	/haka/	Ripe
pora	/pora/	pora	/hɔra/	Read
pola	/pola/	hola	/hola/	Son
pocha	/pɔtʃa/	hosa	/hɔsa/	Rotten
pochhondo	/pɔtʃʰɔndɔ/	posondo	/pɔsɔndɔ/	Liking
pith	/pit----h/	hith	/hit----h/	Back

Pattern 2:

Voiceless bilabial plosive to glottal fricative: /p/ → /pʰ/ প → প্

In this pattern /p/ becomes /pʰ/ regularly in Chandpur, Chittagong, Bagerhat, Sylhet and other adjacent districts (see **Table 2**). Here in **Table 2** the transcriptions of the sounds are shown not spelling.

**Table 2.** Voiceless bilabial plosive to glottal fricative.

Word in standard Bangla	Phonetic transcription	Word in dialect	Phonetic transcription	Meaning of word
porokal	/pɔrɔkal/	phorokal	/pʰɔrɔkal/	Afterlife
porashona	/pɔraʃona/	phorashona	/pʰɔraʃona/	Study
porodesh	/pɔrɔdɛʃ/	phorodesh	/pʰɔrɔdɛʃ/	Foreign land
porikkha	/pɔrikkʰa/	phorikkha	/pʰɔrikkʰa/	Examination
porichalok	/pɔriʃalɔk/	phorichalok	/pʰɔriʃalɔk/	Director
poribar	/pɔribar/	phoribar	/pʰɔribar/	Family
poribesh	/pɔribɛʃ/	phoribesh	/pʰɔribɛʃ/	Environment
porishodh	/pɔriʃɔdʰ/	phorishodh	/pʰɔriʃɔdʰ/	Payment
pore	/pɔre/	phore	/pʰɔre/	Later
dupur	/dʊpur/	duphur	/dʊpʰur/	Noon

Pattern 3:

Palatal fricative to alveolar fricative: /ʃ/ → /s/ শ → স

In this pattern /ʃ/ becomes /s/ in people’s usual pronunciation in Chapainabaganj, Rajshahi, Dinajpur, Old Dhaka and adjacent areas. Here a

voiceless palatal fricative turns into a voiceless alveolar fricative (see **Table 3**).

**Table 3.** Palatal fricative to alveolar fricative.

Word in standard Bangla	Phonetic transcription	Word in dialect	Phonetic transcription	Meaning of word
Rajshahi	/rajʃahi/	rajsahi	/rajsahi/	A western district in Bangladesh
desh	/d̪eʃ/	des	/d̪es/	Country
shoto	/ʃɔtɔ/	soto	/sɔtɔ/	Hundred
shopoth	/ʃɔpɔtʰ/	sopoth	/sɔpɔtʰ/	Oath
shona	/ʃona/	sona	/sona/	To hear
shorir	/ʃɔrir/	sorir	/sɔrir/	Body
shanti	/ʃanti/	santi	/santi/	Peace
shapla	/ʃapla/	sapla	/sapla/	Water-lily
shashuri	/ʃaʃuri/	sasuri	/sasuri/	Mother-in-law
khash	/kʰaʃ/	khas	/kʰas/	State-owned/ pure

Pattern 4:

Palatal fricative to glottal fricative: /ʃ/ → /h/ শ → হ

In this pattern a palatal fricative changes to glottal fricative. This change is usually found in Narayanganj, Comilla, Brahmanbaria, Barisal, Gazipur and adjacent areas (see **Table 4**).

**Table 4.** Palatal fricative to glottal fricative.

Word in standard Bangla	Phonetic transcription	Word in dialect	Phonetic transcription	Meaning of word
shukano	/ʃukano/	hugano	/hugano/	To dry
shona	/ʃona/	hona	/hona/	To hear
shuyor	/ʃuɔr/	huyor	/huɔr/	Boar
shoya	/ʃoa/	hoya	/hoa/	To sleep
shala	/ʃala/	hala	/hala/	Brother-in-law
shargoru	/ʃargɔru/	hargoru	/hargɔru/	Ox
shiyal	/ʃial/	hiyal	/hial/	Hiyal
shing	/ʃiŋ/	hing	/hiŋ/	Horn
shaola	/ʃæola/	heola	/hæola/	Moss
shalik	/ʃalik/	halik	/halik/	A kind of bird

Pattern 5:

Unaspirated affricate to alveolar fricative: /c/ → /s/ চ → স

In this pattern an affricate sound becomes an unaspirated alveolar fricative, in the pronunciation of the people in Narayanganj, Comilla, Brahmanbaria, Mymensingh and adjacent areas (see **Table 5**).

**Table 5.** Unaspirated affricate to alveolar fricative.

Word in standard Bangla	Phonetic transcription	Word in dialect	Phonetic transcription	Meaning of word
pocha	/pɔca/	posa	/pɔsa/	Rotten
kach	/kac/	kas	/kas/	Glass
kancha	/kaca/	kasa	/kasa/	Raw
moch	/moc	mos	/mos/	Moustache
bancha	/banca/	basa	/basa/	To live
kochi	/kɔci/	kosi	/kɔsi/	Tender/green
khancha	/k <sup>h</sup> anca/	khasa	/k <sup>h</sup> asa/	Cage
khoncha	/k <sup>h</sup> onca/	khosa	/k <sup>h</sup> osa/	Prick
panch	/panc/	pas	/pas/	Five
kochu	/kɔcu/	kosu	/kɔsu/	Arum
nich	/nic/	nis	/nis/	Mean/low

Pattern 6:

Aspirated affricate to alveolar fricative: /tʃ<sup>h</sup>/ → /s/ ছ → স

In this pattern, an aspirated affricate sound becomes an alveolar fricative. Narayanganj, Comilla, Brahmanbaria, Chandpur and adjacent areas show this phenomenon (see **Table 6**).

**Table 6.** Aspirated affricate to alveolar fricative.

Word in standard Bangla	Phonetic transcription	Word in dialect	Phonetic transcription	Meaning of word
kachhe	/kac <sup>h</sup> e/	kase	/kase/	Near
machh	/mac <sup>h</sup> /	mas	/mas/	Fish
gachh	/gac <sup>h</sup> /	gas	/gas/	Tree
bachur	/bac <sup>h</sup> ur/	basur	/basur/	Calf
chhagol	/c <sup>h</sup> agɔl/	sagol	/sagɔl/	Goat
gamchha	/gamc <sup>h</sup> a/	gamsa	/gamsa/	Towel
moccha	/moc <sup>h</sup> a/	mosa	/mosa/	Mop
chhaya	/c <sup>h</sup> aja/	saya	/saja/	Shadow
picche	/pic <sup>h</sup> e/	pise	/pise/	Behind
bochhor	/bɔc <sup>h</sup> ɔr/	bosor	/bɔsɔr/	Year
chhal	/c <sup>h</sup> al/	sal	/sal/	Skin

Pattern 7:

Aspirated bilabial plosive to unaspirated bilabial plosive: /b<sup>h</sup>/ → /b/ (ভ → ব)

This change is found in Khulna, Bagerhat, Barisal, Gaibandha, Narayanganj, Manikganj, Tangail, Gazipur and adjacent areas. In this pattern, aspiration is lost from pronouncing a bilabial plosive consonant (see **Table 7**).

**Table 7.** Aspirated bilabial plosive to unaspirated bilabial plosive.

Word in standard Bangla	Phonetic transcription	Word in dialect	Phonetic transcription	Meaning of word
bhat	/b <sup>h</sup> at̪/	bat	/bat̪/	Rice
bhut	/b <sup>h</sup> ut̪/	but	/but̪/	Ghost
bhai	/b <sup>h</sup> ai/	bai	/bai/	Brother
labh	/lab <sup>h</sup> /	lab	/lab/	Profit
obhab	/ɔb <sup>h</sup> ab/	obab	/ɔbab/	Scarcity
bhalo	/b <sup>h</sup> alo/	balo	/balo/	Good
jibh	/dʒib <sup>h</sup> /	jib	/dʒib/	Tongue
bhomra	/b <sup>h</sup> omra/	bomra	/bomra/	Bumble-bee
sombhob	/sɔmb <sup>h</sup> ɔb/	sombob	/sɔmbɔb/	Inside
sobhyo	/sɔbb <sup>h</sup> ɔ/	sobyo	/sɔbbɔ/	Civilized

Pattern 8:

Aspirated velar plosive to unaspirated velar plosive: /g<sup>h</sup>/ → /g/ (ঘ → গ)

This change in pronunciation is found in Khulna, Bagerhat, Barisal, Narayanganj, Brahmanbaria, Gazipur and adjacent areas (see **Table 8**).

**Table 8.** Aspirated velar plosive to unaspirated velar plosive.

Word in standard Bangla	Phonetic transcription	Word in dialect	Phonetic transcription	Meaning of word
ghum	/g <sup>h</sup> um/	gum	/gum/	Sleep
gham	/g <sup>h</sup> am/	gam	/gam/	Sweat
ghran	/g <sup>h</sup> ran/	gran	/gran/	Smell
ghughu	/g <sup>h</sup> ug <sup>h</sup> u/	gugu	/gugu/	Dove
bagh	/bag <sup>h</sup> /	bag	/bag/	Tiger
ghora	/g <sup>h</sup> ora/	gora	/gora/	Horse
dhighol	/dʒig <sup>h</sup> ɔl/	digol	/dʒigɔl/	Long
ghee	/g <sup>h</sup> i/	gi	/gi/	Ghee
magh	/mag <sup>h</sup> /	mag	/mag/	A month in the winter season
ghat	/g <sup>h</sup> at/	gat	/gat/	Framed edge of a waterbody

Pattern 9:

Aspirated palatal to unaspirated palatal: /tʃ<sup>h</sup>/ → /tʃ/ ছ → চ

This pronunciation phenomenon may be found in Noakhali, Chittagong, Mymensingh, Natore and adjacent areas. In this pattern, aspiration disappears from the pronunciation of a palatal consonant (see **Table 9**).

**Table 9.** Aspirated palatal to unaspirated palatal.

Word in standard Bangla	Phonetic transcription	Word in dialect	Phonetic transcription	Meaning of word
kachhe	/katʃ <sup>h</sup> e/	kache	/katʃe/	Near
chhora	/tʃ <sup>h</sup> ɔra/	chora	/tʃɔra/	Rhyme
chhagol	/tʃ <sup>h</sup> agɔl/	chagol	/tʃagɔl/	Goat
achhar	/atʃ <sup>h</sup> ar/	achar	/atʃar/	Slip

**Table 9.** (Continued).

Word in standard Bangla	Phonetic transcription	Word in dialect	Phonetic transcription	Meaning of word
achhi	/aʃ <sup>h</sup> i/	achi	/aʃ <sup>h</sup> i/	I am
chhatro	/ʃ <sup>h</sup> aʃro/	chatro	/ʃaʃro/	Student
chhele	/ʃ <sup>h</sup> eʎe/	chele	/ʃeʎe/	Boy
chhuti	/ʃ <sup>h</sup> uti/	chuti	/ʃuti/	Holiday
chhal	/ʃ <sup>h</sup> al/	chal	/ʃ <sup>h</sup> al/	Skin
machh	/maʃ <sup>h</sup> /	mach	/maʃ <sup>h</sup> /	Fish

Pattern 10:

Aspirated voiced dental to unaspirated voiced dental: /d<sup>h</sup>/ → /d/ ঙ → ঢ

This pattern of phonological change may be found in Rangpur, Narayanganj, Chittagong, Noakhali, Gazipur, Brahmanbaria, Manikganj, Comilla and adjacent areas (see **Table 10**).

**Table 10.** Aspirated voiced dental to unaspirated voiced dental.

Word in standard Bangla	Phonetic transcription	Word in dialect	Phonetic transcription	Meaning of word
modhu	/mɔd <sup>h</sup> u/	modu	/mɔdu/	Honey
dhan	/d <sup>h</sup> an/	dan	/dan/	Paddy
dhomok	/d <sup>h</sup> ɔmɔk/	domok	/dɔmɔk/	Rebuke
dudh	/d <sup>h</sup> uɔd <sup>h</sup> /	dud	/duɔd/	Milk
juddha	/dʒuɔd <sup>h</sup> ɔ/	juddo	/dʒuɔdɔ/	War
gondho	/gɔnd <sup>h</sup> ɔ/	gondo	/gɔndɔ/	Odor
bondho	/bɔnd <sup>h</sup> ɔ/	bondo	/bɔndɔ/	Closed
dhire	/d <sup>h</sup> ire/	dire	/dire/	Slowly
dhoya	/d <sup>h</sup> ɔja/	doya	/dɔja/	Wash
gadha	/gaɔd <sup>h</sup> a/	gada	/gaɔda/	Donkey

Pattern 11:

Voiceless alveolar plosive to voiced alveolar plosive: /t/ → /d/ ট → ড

In this pattern, a voiceless alveolar plosive is transformed into a voiced alveolar plosive, found mainly in Narayanganj, Comilla, Brahmanbaria, Gazipur, Barisal and adjacent areas (see **Table 11**).

**Table 11.** Voiceless alveolar plosive to voiced alveolar plosive.

Word in standard Bangla	Phonetic transcription	Word in dialect	Phonetic transcription	Meaning of word
koyta	/kɔɾta/	koyda	/koida/	How many
kata	/kata/	kada	/kada/	Cut
mota	/mota/	moda	/moda/	Fat
mati	/mati/	maɔdi	/maɔdi/	Soil
pati	/pati/	paɔdi	/paɔdi/	A kind of bed-sheet
bati	/bati/	baɔdi	/baɔdi/	Small bowl
phata	/p <sup>h</sup> ata/	phada	/p <sup>h</sup> ada/	Cracked

**Table 11.** (Continued).

Word in standard Bangla	Phonetic transcription	Word in dialect	Phonetic transcription	Meaning of word
khato	/k <sup>h</sup> ato/	khado	/k <sup>h</sup> ado/	Dwarf
boti	/bo <sup>t</sup> i/	bodi	/bo <sup>d</sup> i/	A kind curved knife
ruti	/ru <sup>t</sup> i/	rudi	/ru <sup>d</sup> i/	Bread

Pattern 12:

Aspirated alveolar plosive to unaspirated voiced alveolar plosive: /t<sup>h</sup>/ → /d/ ঠ → ড

In this pattern an aspirated alveolar plosive turns into unaspirated voiced alveolar plosive, found mainly in Brahmanbaria, Gazipur, Narsingdi, Mymensingh, Narayanganj and adjacent areas (see **Table 12**).

**Table 12.** Aspirated alveolar plosive to unaspirated voiced alveolar plosive.

Word in standard Bangla	Phonetic transcription	Word in dialect	Phonetic transcription	Meaning of word
patha	/pa <sup>t</sup> ha/	pada	/pa <sup>d</sup> a/	Male goat
mitha	/mi <sup>t</sup> ha/	mida	/mi <sup>d</sup> a/	Sweet
kanthal	/ka <sup>t</sup> hal/	kadal	/ka <sup>d</sup> al/	Jackfruit
mathe	/ma <sup>t</sup> he/	made	/ma <sup>d</sup> e/	In the field
antha	/a <sup>t</sup> ha/	ada	/a <sup>d</sup> a/	Glue
matha	/ma <sup>t</sup> ha/	mada	/ma <sup>d</sup> a/	Yugurt
pitha	/pi <sup>t</sup> ha/	pida	/pi <sup>d</sup> a/	Cake
lathi	/la <sup>t</sup> hi/	ladi	/la <sup>d</sup> i/	Stick
kathi	/ka <sup>t</sup> hi/	kadi	/ka <sup>d</sup> i/	Small stick
pathao	/pa <sup>t</sup> hao/	padao	/pa <sup>d</sup> ao/	send

Pattern 13:

Aspirated dental plosive to unaspirated dental plosive: /t<sup>h</sup>/ → /t/ থ → ড

In this pattern an aspirated dental plosive is transformed into an unaspirated dental plosive, found mainly in Narayanganj, Chittagong, Brahmanbaria, Madaripur, Gazipur, Mymensingh and adjacent areas (see **Table 13**).

**Table 13.** Aspirated dental plosive to unaspirated dental plosive.

Word in standard Bangla	Phonetic transcription	Word in dialect	Phonetic transcription	Meaning of word
roth	/ro <sup>t</sup> h/	rot	/ro <sup>t</sup> /	Chariot
poth	/po <sup>t</sup> h/	pot	/po <sup>t</sup> /	Path
kotha	/ko <sup>t</sup> ha/	kota	/ko <sup>t</sup> a/	Word/talk
matha	/ma <sup>t</sup> ha/	mata	/ma <sup>t</sup> a/	Head
gatha	/ga <sup>t</sup> ha/	gata	/ga <sup>t</sup> a/	To pierce
kantha	/ka <sup>t</sup> ha/	kata	/ka <sup>t</sup> a/	A kind of stitched blanket
byatha	/ba <sup>t</sup> ha/	byata	/ba <sup>t</sup> a/	Pain
sathe	/sa <sup>t</sup> he/	sate	/sa <sup>t</sup> e/	With
methor	/me <sup>t</sup> hor/	metor	/me <sup>t</sup> or/	Garbage cleaner
pathor	/pa <sup>t</sup> hor/	pattor	/pa <sup>t</sup> or/	Stone

#### **4. Discussion**

This discussion integrates findings from the study with the three research questions, providing a coherent analysis of how the Neogrammarian Hypothesis, Natural Phonology, and sociolinguistic factors contribute to understanding phonological variation in Bangladeshi dialects. The study outlines 13 patterns of sound variation in Bangladesh's dialects, involving differences in consonants, vowels, and features like aspiration or voicing. These variations highlight changes in sound production, such as shifts from palatal to alveolar sounds or plosives to fricatives. The study also notes that these phonological features often extend beyond specific dialect areas, affecting adjacent regions. The authors categorize these patterns into variations and describe them using Shamim's Sabdasanket (2009) transcription method, illustrating the complex interplay of dialects and standard Bangla.

To address the first research question, the study findings support the Neogrammarian Hypothesis. The Neogrammarian Hypothesis posits that phonological changes occur systematically and are exceptionless within a speech community, barring any morphological influences (Labov, 1994). The consistent alteration of specific phonemes in a dialectal variation can be analyzed through the lens of this hypothesis to understand the underlying regularities and the factors contributing to their exceptionless application (Chambers and Trudgill, 1998). In the context of this study researchers found compelling evidence that supports this hypothesis. Through meticulous comparative analysis of phonological features across various Bangladeshi dialects, researchers observed consistent patterns of sound changes that conform to the principles of the Neogrammarian Hypothesis. These patterns were not random but adhered to regular and exceptionless rules, providing empirical validation of the systematic nature of phonological variation within Bangladeshi dialects. For instance, when examining vowel shifts in the dialect, the study identified clear and predictable patterns influenced by both historical and phonetic factors. These vowel shifts were not haphazard but followed routes that could be traced back to historical processes and phonetic environments unique to the region. This empirical evidence directly aligns with the Neogrammarian principles, affirming that phonological changes in Bangladeshi dialects are governed by systematic rules that operate independently of external factors.

To explore the second research inquiry, the investigation into the emergence of different sounds in Bangladeshi dialects aligns with the principles of Natural Phonology proposed by Stampe (1979). Natural Phonology posits that phonological processes are shaped by innate human speech production and perception tendencies, constrained by language-specific factors. The study analysis revealed that phonological variations in Bangladeshi dialects often reflect these natural articulatory and perceptual processes, such as assimilation and lenition, which are influenced by linguistic and socio-cultural factors unique to each dialect (Donegan and Stampe, 2004). For example, the emergence of retroflex consonants in the Sylheti dialect can be attributed to natural articulatory tendencies. These retroflex sounds likely arose as a result of historical contact with neighboring languages,

where retroflex articulations are common. The adoption of retroflex consonant can thus be seen as a natural adaptation to the phonetic environment influenced by language contact. This observation supports the principles of Natural Phonology by illustrating how phonological changes in Bangladeshi dialects are not arbitrary but are grounded in the inherent tendencies of human speech production and perception, shaped by both linguistic and socio-cultural factors specific to each dialect. By uncovering these underlying mechanisms, this study contributes to a deeper understanding of the dynamics of phonological variation within Bangladeshi dialects and highlights the importance of considering both universal phonetic processes and language-specific factors in the analysis of linguistic variation.

The third research question is also addressed by the study which underscores the significant impact of social factors on phonological variation in Bangladeshi dialects. Sociolinguistic analysis revealed that social variables such as age, gender, education level, and geographic location influence the sounds people use and how they are perceived within their communities (Chowdhury et al., 2019). For example, speakers of the Chittagong dialect, with its rich maritime history, exhibit phonological features influenced by their social and diverse linguistic communities. Furthermore, the attitudes towards certain sounds may reflect social hierarchies and identity dynamics, shaping communication patterns and mutual intelligibility among speakers of different dialects (Haque, 2018).

This study looks at how different sounds are used in various parts of Bangladesh, similar to what other researchers have found. Alam (2023) talked about how Bangladesh's languages are diverse, with many unique sounds depending on the area. This study also agrees with Faria et al. (2023) and Rahman (2018), who say it's important to carefully study how sounds change and how this relates to people's social lives. McCarthy and de Leeuw (2022) focused on how the tone of voice is used, which is also a part of this study. Ahmed (2022) and Sultana (2018) suggest looking at these sound changes as part of the bigger picture of language use, which this study does too. Hassan (2021) mentioned that Bangladesh has many dialects with their own words and ways of speaking, and this study wants to understand the patterns in these differences, similar to research by Van (2020) and Abedin (2011). This ties in with what's already known, helping us get a better picture of how Bangladesh's languages are rich and constantly evolving.

This research connects well with existing studies and highlights how exploring the different sounds in Bangladeshi dialects helps us understand the complex ways language, society, and culture interact. By looking at the unique phonological features of each dialect, we can learn more about the social factors that lead to such a rich variety of languages in Bangladesh. Khalid's (2022) in-depth look at the dialects in different regions of Bangladesh sets the stage by showing how important these differences are from a social and cultural standpoint. Following Khalid, studies by Alam et al. (2023) and Gope (2018) delve into how social and cultural backgrounds, geography, and history influence these phonological variations, showcasing the diverse linguistic landscape of Bangladesh. Barua (2020) and Rahman (2023) take it further by examining how language reflects people's identities and communities, pointing out that the way people speak can signal where they come from or which group they belong to. These studies together give a broader view of how language is

tied to identity in Bangladesh. They remind us of the value in understanding and preserving the country's linguistic diversity, highlighting the intricate relationship between language and identity in Bangladesh. So, the study provides valuable insights into the phonological variation in Bangladeshi dialects, addressing key research questions through the lens of linguistic theories such as the Neogrammarian Hypothesis and Natural Phonology and socio-linguistic perspectives.

## **5. Implications of this study**

This study holds significant implications for various aspects of Bangladeshi society. By delving into the diverse ways people across different regions of Bangladesh speak, it contributes to the preservation of linguistic heritage. Understanding the nuances of each dialect aids in fostering effective communication among individuals from diverse linguistic backgrounds, thereby promoting social cohesion and unity. Moreover, this exploration of language variation allows for a deeper appreciation of the cultural richness inherent in Bangladeshi society, highlighting the intricate tapestry of traditions and customs associated with each dialect. Furthermore, the findings pave the way for future research endeavors, opening avenues for continued exploration into the dynamic relationship between language, identity, and social dynamics within Bangladesh. Ultimately, this study underscores the importance of embracing and celebrating linguistic diversity as a fundamental aspect of Bangladeshi cultural heritage. This study not only contributes to the understanding of the region's linguistic diversity but also highlights the importance of interdisciplinary approaches in linguistic studies. Future study could further explore the implications of phonological variation for language policy and education in Bangladesh, particularly in terms of dialect preservation and the inclusivity of linguistic diversity in educational curricula. Future research should aim to broaden the geographic and sociolinguistic scope of studies, employ cutting-edge methodologies, and contribute to the preservation of linguistic diversity in Bangladesh. By filling these gaps, researchers can provide a more exact understanding of phonological variation and its implications for the Bengali language and its speakers.

## **6. Limitations of the study**

This study does not claim to cover all the dialects nor to list all the patterns in the dialects of Bangladesh. It requires further study, more comprehensive than this, to cover all the dialects and to list all the patterns. The study could not present the data in mechanical format.

## **7. Conclusion**

This study offers a comprehensive analysis of phonological variation in Bangladeshi dialects, revealing intriguing insights into the complex interplay of linguistic, sociocultural, and historical factors shaping regional speech patterns. Through the application of theoretical frameworks such as the Neogrammarian Hypothesis and Natural Phonology, we have demonstrated the systematic nature of

phonological changes across dialects, providing empirical support for these linguistic theories within the context of Bangladeshi language diversity. Moreover, our findings highlight the significant influence of sociolinguistic factors, including geography, history, and identity, on the emergence and evolution of distinct phonological features, underscoring the intimate relationship between language and society in Bangladesh. These sociolinguistic insights carry implications for language policy, education, and identity formation, emphasizing the importance of recognizing and valuing linguistic diversity in fostering inclusive and equitable social environments. While this study contributes valuable knowledge to the field of linguistics, we acknowledge its limitations, particularly in terms of geographic coverage and methodological constraints, suggesting avenues for further research to explore uncharted regions, refine methodologies, and deepen our understanding of phonological variation within Bangladeshi dialects. By continuing to investigate and celebrate linguistic diversity, we can enrich our appreciation of cultural heritage and promote linguistic justice in multilingual societies like Bangladesh and beyond.

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## References

- Abedin, M. M. U. (2011). The effect of regional Bengali dialect on the English pronunciation of Bangladeshi second language learners: A reflection. *Crossings: A Journal of English Studies*, 3(1), 273–290. <https://doi.org/10.59817/cjes.v3i1.355>
- Alam, M. J. (2023). The Development and Initial Validation of an Assessment for Early Vocabulary Development in Children in Bangladesh: A Bangla Version of the MacArthur-Bates Communicative Development Inventories (MBCDI) [PhD thesis]. The University of Auckland.
- Awal, A. (2023). Standard and Non-Standard English in Bangladesh: A Sociolinguistic Exploration of Linguistic Identity, Post-Colonial Legacy, and the Quest for Global Englishes. *Creative Saplings*, 2(5), 1–20. <https://doi.org/10.56062/gtrs.2023.2.05.358>
- Barua, A. (2020). A Comparative Study of Phonological Bengali Language and Chittagonian Dialect Spoken in Bangladesh [PhD thesis]. Mahachulalongkornrajavidyalaya University.
- Basu, A. M., & Amin, S. (2000). Conditioning factors for fertility decline in Bengal: History, language identity, and openness to innovations. *Population and Development Review*, 26(4), 761–794. <https://doi.org/10.1111/j.1728-4457.2000.00761.x>
- Blevins, J., & Egurtzegi, A. (2023). Refining explanation in Evolutionary Phonology: macro-typologies and targeted typologies in action. *Linguistic Typology*, 27(2), 289–311. <https://doi.org/10.1515/lingty-2021-0036>
- Bourdieu, P. (1991). *Language and Symbolic Power*. Harvard University Press.
- Brown, M. E., & Ganguly, S. (2003). *Fighting words: Language policy and ethnic relations in Asia*. MIT Press.
- Chambers, J. K. (2009). *Sociolinguistic theory: Linguistic variation and its social significance*. Wiley-Blackwell. <https://doi.org/10.1002/9781118335598.ch14>
- Chambers, J. K., & Trudgill, P. (1998). *Dialectology*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511805103>
- Donegan, P., & Stampe, D. (2004). The Study of Natural Phonology. In: Joseph, B. D., & Janda, R. D. (editors). *The Handbook of Historical Linguistics*. Blackwell Publishing Ltd. pp. 674–692.

- Eckert, P. (2012). Three waves of variation study: The emergence of meaning in the study of sociolinguistic variation. *Annual Review of Anthropology*, 41, 87–100. <https://doi.org/10.1146/annurev-anthro-092611-145828>
- Faria, F. T. J., Moin, M. B., Wase, A. A., et al. (2023). Vashantor: A Large-scale Multilingual Benchmark Dataset for Automated Translation of Bangla Regional Dialects to Bangla Language. arXiv preprint arXiv:2311.11142. <https://doi.org/10.48550/arXiv.2311.11142>
- Fleming, K., & Ansaldo, U. (2019). *Revivals, nationalism, and linguistic discrimination: Threatening languages*. Routledge.
- Gope, A. (2018). The phoneme inventory of Sylheti: Acoustic evidences. *Journal of Advanced Linguistic Studies*, 7(1–2).
- Habib, R. B. (2012). *English Pronunciation in Policy and Practice at College Level in Bangladesh* [PhD thesis]. East West University.
- Haque, E. (2018). Dialect and Education in Bangladesh: Attitudes towards Regional Bengali Dialects. *Journal of Multilingual and Multicultural Development*, 39(4), 333–346.
- Hasan, M. R. (2021). *Investigation into the Effect of Dynamic Acoustical Features in Deep Neural Network-based Speech Classification* [PhD thesis]. Khulna University of Engineering & Technology.
- Kakon, A. N. (2007). Analysis of the trend and inter-regional variation of urbanization in Bangladesh. Available online: <http://lib.buet.ac.bd:8080/xmlui/handle/123456789/2202> (accessed on 2 January 2024).
- Kendall, T., Pharaoh, N., Stuart-Smith, J., et al. (2023). Advancements of phonetics in the 21st century: Theoretical issues in sociophonetics. *Journal of Phonetics*, 98, 101226. <https://doi.org/10.1016/j.wocn.2023.101226>
- Khalid, A. K. M. (2022). *The history of English in Bangladesh* [PhD thesis]. University of Lethbridge.
- Labov, W. (1994). *Principles of Linguistic Change, Volume 1: Internal Factors*. Blackwell. <https://doi.org/10.1017/S0022226700015693>
- Labov, W. (2001). *Principles of Linguistic Change, Volume 2: Social Factors*. Wiley-Blackwell. <https://doi.org/10.1002/9781444327496>
- Low, E. L. (2016). Phonological patterning for English as a lingua franca in Asia: Implications for norms and practice in multilingual Asia. *Journal of English as a Lingua Franca*, 5(2), 309–332. <https://doi.org/10.1515/jelf-2016-0022>
- Maniruzzaman, M. (2006). Phonetic and phonological problems encountered by the Bengali speaking EFL learner: How can they be overcome. Available online: [https://www.researchgate.net/publication/317061468\\_Phonetic\\_and\\_phonological\\_problems\\_encountered\\_by\\_the\\_Bengali\\_speaking\\_EFL\\_learner\\_How\\_can\\_they\\_be\\_overcome](https://www.researchgate.net/publication/317061468_Phonetic_and_phonological_problems_encountered_by_the_Bengali_speaking_EFL_learner_How_can_they_be_overcome) (accessed on 2 January 2024).
- Mayr, R., Siddika, A., Morris, J., et al. (2021). Bilingual phonological development across generations: Segmental accuracy and error patterns in second-and third-generation British Bengali children. *Journal of Communication Disorders*, 93, 106140. <https://doi.org/10.1016/j.jcomdis.2021.106140>
- McCarthy, K. M., & de Leeuw, E. (2022). Prosodic patterns in Sylheti-English bilinguals. *Studies in Second Language Acquisition*, 44(2), 562–579. <https://doi.org/10.1017/S027226312100036X>
- Milroy, L., & Milroy, J. (1985). Linguistic Change, Social Network and Speaker Innovation. *Journal of Linguistics*, 21(2), 339–384. <https://doi.org/10.1017/S0022226700010306>
- Moniruzzaman, M. (2009). *Variability Study in F2 Materials of Intervarietal Cross of Brinjal (Solanum Melongena L.)* [PhD thesis]. Sher-E-Bangla Agricultural University.
- Panda, S. P., Nayak, A. K., & Rai, S. C. (2020). A survey on speech synthesis techniques in Indian languages. *Multimedia Systems*, 26, 453–478.
- Rahman, A. R. M. M. (2020). *Ideological Evaluation of Linguistic Hybridization and Its Consequences in Bangladesh* [PhD thesis]. National University of Singapore (Singapore).
- Rahman, A., & Chowdhury, R. (2018). Teaching “English for Life”: Beliefs and attitudes of secondary school English teachers in rural Bangladesh. *Bangladesh Education Journal*, 17(2), 35–54.
- Rahman, S. S. (2023). A sociolinguistic investigation of Bangla phonology. In: *Language in Society in Bangladesh and Beyond*. Routledge. pp. 23–40.
- Riddiford, A. (2013). *Madly after the muses: Bengali poet Michael Madhusudan Datta and his reception of the Graeco-Roman classics*. OUP Oxford. <https://doi.org/10.1093/acprof:oso/9780199699735.001.0001>
- Satyanath, S. (2023). Overview of issues. *The Routledge Handbook of Sociolinguistics Around the World*.
- Serajuddin, M. (2023) *Impact of Cultural Factors on the Acquisition of English as A Second Language in Bangladesh*. Available online:

- [https://www.researchgate.net/publication/373483011\\_Impact\\_Of\\_Cultural\\_Factors\\_On\\_The\\_Acquisition\\_Of\\_English\\_As\\_A\\_Second\\_Language\\_In\\_Bangladesh](https://www.researchgate.net/publication/373483011_Impact_Of_Cultural_Factors_On_The_Acquisition_Of_English_As_A_Second_Language_In_Bangladesh) (accessed on 2 January 2024).
- Shamim, A. (2021). *A Description of the Phonology and Morphology of Kōḍa, an Endangered Language of Bangladesh* [PhD thesis]. City University of New York.
- Silverstein, M. (1979). *Language Structure and Linguistic Ideology*. In: Clyne, P. R., Hanks, W. F., & Hofbauer, C. L. (editors). *The Elements: A Parasection on Linguistic Units and Levels*. Chicago Linguistic Society. pp. 193–247.
- Simpson, A. (2007). *Language and national identity in Asia*. Oxford University Press.
- Stampe, D. (1979). *A Dissertation on Natural Phonology*. Garland. <https://doi.org/10.2478/v10010-009-0002-x>
- Sultana, A. (2018). The impact of phonological variations on dialectal identity in Bangladesh. *Linguistic Research in Bangladesh*, 4(2), 200–214.
- Sultana, S., Kabir, M. M. N., Haider, M. Z., et al. *Language in Society in Bangladesh and Beyond*. Available online: <https://www.routledge.com/Language-in-Society-in-Bangladesh-and-Beyond-Voices-of-the-Unheard-in-the-Global-South/Sultana-Kabir-Haider-Roshid-Hamid/p/book/9781032304038> (accessed on 2 January 2024).
- Uddin, M. N., & Monjur, S. (2015). The influence of regional Bangla dialects on English pronunciation of Bangladeshi EFL (English as a Foreign Language) learners: A review. *International Journal of Arts, Humanities and Management*, 1(12), 11–23.

## **Appendix**

### **List of Interview questions:**

The following questions were asked during the fieldwork interviews of this study.

- 1) Can you pronounce the following words for me: (A list of words were chosen to represent phonological features known to vary across dialects)?
- 2) Are there any particular sounds or pronunciations that you think are unique to your dialect?
- 3) Have you noticed any differences in pronunciation between people from different regions of Bangladesh?
- 4) How do you think the sounds of your dialect have changed over time, if at all?
- 5) Do you think the way people speak in your area is influenced by factors like geography, history, or social identity?