A Thesis

on

Phonological Patterns in Standard Colloquial Bangla and Netrokona Dialect

Submitted to

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Abstract

Bangla language has a number of dialects which vary in great degree in their phonology. Netrokona district is situated in the north east area of Bangladesh. This cross sectional study was done to describe and analyze the phonological components of Standard Colloquial Bangla and Netrokona Dialect. ND(Netrocona Dialect) is contrastive in nature. This study is synchronic as both SCB and ND are spoken at the present time and both the forms are shown at a level which corresponds. The phonological sections are broadly divided into general sub-sections. The inventory of consonant phonemes has been classified in this thesis. Vocalic and consonantal features of SCB and ND have been explained such as diphthongssemi vowels, nasalization, aspiration, voicing, assimilation, glottalization, gottal stop, consonant clusters, germination, spirantization.

Introduction

Language is specific in form, content, style within the phonetic, syntactic and semantic features as a social interaction. It is a means of nourishing and developing culture and establishing human relations. It can fully be described only if we know all about the people who are involved in their personalities, their beliefs, attitudes, knowledge of the world, relationship to each other, their social status, what activities they are engaged in, what they talk about, the situation they are placed in (context). Shunitikumar Chattarjee(1939, 1989) says – ‘’Language is an assembly of sounds, which is produced by human with the help of speech organs in a community. ‘’(p:02)

Bangla is an eastern Indo-Iuropean language. It is native to the region of eastern South Asia known as Bengal which comprises present day Bangladesh, the Indian state of West Bengol and part of the Indian states of Tripura and Assam. Chaltibhasa is based on the cultivated form of the dialects of Kolkata. By the early 21st century it had become the dominant literary language as well as the standard colloquial form of speech among the educated. *Cholitobhasha* known by linguists as Standard Colloquial Bangla, is a written Bengali style exhibiting a preponderance of colloquial idiom and shortened verb and pronoun forms, and is the standard for written Bangla now.

There are a number of people who speak complete Standard Colloquial Bangla. In the rural and also in many parts of urban area, people speak using dialect and Standard Colloquial Bangla. People who do not come to know the Bangla Alphabet at all they use the phonemes and morphemes from their natural environment and this type of language is evidently called original dialect (learn from nature). It is the product of individual’s geographical and class origin. It differs in grammar, pronunciation and vocabulary from the standard language. Regional dialects are spoken by the people of a particular geographical area within a speech community.

Bloomfield (1933) says – “Every village or at most every cluster of two or three villages has its local peculiarities of speech.’’ (p:325-6). With regard to regional dialect two or more villages may have same speech patterns and according to the definition of Bloomfield same pattern of language of two or more areas is also called dialect.

Raven I. Mc David (1967) say – "Standard and sub-standard shared the same pronunciation system, the same pronunciation of vowels and consonants and the typical regional vocabulary, they differed in grammar (morpheme & phoneme variation) and in which vowels and consonants occurred in a given word." (p:98). According to this definition standard language and variety of that language may use same vowel /consonant phonemes (a, o, k, g, h) but people who speaks in dialect form may not use the same phoneme of a particular morpheme which the people of standard language use for that very morpheme for example [peara] (guava) is the standard morpheme for Bangla language but for Netrokona district the dialect form of that morpheme is[goiob].

Sukumar Sen in his book Bhshar Itibritto defines dialect in this way: "when people are large in number they are broken into different group in different communities. They are controlled by respective social, economical system and they get the scope to interact each other intimately and there are noticeable differences in utterances and vocabulary considering a particular group/region. In this way different dialects are originated".(p:18) In true sense, difference in utterance, and vocabulary application, different dialects are created in a particular language. According to his notion people from a particular region interact with each other using several special words, expressions. They are accustomed to use the words in their every spheres of life (political, economical, and social).

The major dialect groups can be broadly divided into the following classes:

Northern Bangla: The dialects of Dinajpur, Rajshahi, Bogra, and Pabna.

Rajbangshi: The dialects of Rangpur.

Eastern Bangla: The dialects of Dhaka, Mymenshingh, Sylhet

Faridpur,Jessore, Khulna

Southern Bangla: Chittagong , Noakhali, Chakma

The above classification is made by Grierson (1903-1928) and is based more on geographical distribution than on structural criteria. Sylheti dialect is structurally closer to the dialects of Noakhali and Chittagong than those of Dhaka, Mymensingh. (as cited in

Chowdhury1960,Hai1965,Ray1966). Apart from the dialects of Sylhet, Noakhali, Chittagong and Rangpur, the rest of the dialects are mutually comprehensible as well as intelligible due to authentic similarities in phonology and grammar (use of adjective, noun etc). Due to the dialect situation of Bangladesh, most educated Bangalis are fully aware of the language.(as cited in Chowdhury 1960 :75).

Literature Review

Phoneme:

Bernard Bloch says "A phoneme is a class of sounds in the utterances of a given dialect, such that (a) all members of the class contain a feature absent from all other sounds, (b) the differences among them are in a free variation and (c) the class belongs to a set of classes that are mutually contrasting and conjointly exhaustive."

According to his theory a particular language must have a particular, fixed set of sounds(phonemes) and the dialect of that language must have several common sounds (of that language and the number of dialectal phonemes must be lesser than the original number of phonemes of that particular language. All the phonemes have to maintain class in light of place and manner of articulation.

Phonology:

According to R.L. Trask, phonology deals with the ways in which sounds behave in languages and it is a central part of linguistics. (p.235) .It is concerned with the abstract, grammatical characterization of systems (phonetic alterations of consonants and vowels) of sounds or signs. There are two types of phoneme: vowel phoneme and consonant phoneme.

Vowel:

When lungs originated air passes through the mouth without creating any obstruction, then vowel phonemes are produced. Daniel Jones (1999) refers that a vowel is (in normal speech) defined as a voiced sound in forming which the air issues in a continuous stream through the pharynx and mouth, there being no obstruction and no narrowing such as would audible friction.(p:23)

Rechards et al;(1987) clarifies that vowel is a speech sound in which air stream from the lungs is not blocked in any way in the mouth or throat(pharynx) and which is pronounced with the vibration of the vocal cords(voicing)(p:309). There are seven vowels in Standard Colloquial Bangla /a/,/e/,/o/,/u/,/ae/,/ ɔ/

Diphthongs

Diphthong is a term used in the phonetic classification of vowel sounds on the basis of their manner of articulation. It refers to a vowel where there is a single noticeable change in quality during a single syllable. (Crystal; 1992: 139)According to him diphthong depends on the changing sound quality of vowel. Every vowel holds some characteristics according to lip and tongue position. In case of diphthong the tongue utters the first vowel and within a single moment the tongue utters rapidly the second vowel and the former articulation is not lucid. (as cited in Hai; 1994 : 36)

Diphthong → vowel + glide for example in the word [oi] for [boi] and [oa] for [moa] are diphthongs. According Shunitikumar Chaterjee (1939, 1998) – there are 23diphthongs in Bangla.[i]:[ie][nieche](taken);[ia][hiar](heart);[io][dio](youwillgive);[iu][piu](flower);[e][ei][nei](finished);[ea][kea](flower);[eo][ceo(youwillwant);[eu][keu] (some one);[ae][aee][daee] (responsibility);[aeo][khaeo](willeat);[a][ae][khae](eats);[ao][nao](take);[au][daudau](settingfire);[ɔ][ɔe][hɔe](is);[ɔo][hɔo]be;[o][oi][koi](fish);[oe][dhoe](washes);[oa][noa](bending);[ou][bou (wife);[u][ui][dui](two);[ue][due due] (two+two=four);[ua][bua] (house keeper);[uo][kuo](well)

Whereas Md. Abdul Hai (1964, 1994 : 36) says that there are only 19 diphthongs in Bangla

[i][ii][dii] (give);[iu][miu] (sound of cat);[e] [ei][dei](give);[eo][jeo](go);[eu][keu]

(someone);[ae][aeo][daeor] brother in law;[aey][naey] justice;[a] [ai][khai](eat);[ao][dao] (give);[au][jhau] one kind of tree;[ae][bae] in the left;[ɔ][ɔo][hɔo] be;[ɔy][nɔy] nine;[o][oo][ʃoo ʃoo] sound of air;[ou][mou]honey;[oi][boi](book)[oy][ʃoy] lies down;[u][ui][jui] (flower);[uu][kuu] (calling of cuckoo).

Abdul Hai defines 12 irregular diphthongs and except [aea] the othe 11 diphthongs are as same as Shunitikumar Chaterjee's referred diphthongs.

Semi vowels

In general sense, the gliding vowel is called semi-vowel which cannot make any syllable and for this reason, it can be called non-syllabic – vowel. British linguist Daniel Jones(1997) says – Semi-vowel is a voiced gliding sound in which speech organs start by producing a vowel of comparatively small prominence and immediately change to a more prominent vowel.' (p:o4) Jones clarifies the term voiced gliding vowel and this very vowel is not structured into full vowel.

.Md. Abdul Hai states that in terms of the position of tongue there is no specific location of semivowel, its timing of utterance is very trivial i.e. the vowel is uttered before it is prominently constructed and when the semi-vowel utters the air-stream passes through a narrow way and that is why its friction quality is very low. Furguson, et al (1960 : 29) define that there are 4 semi-vowels in Bangla [i,e,o,u]

[i] → [boi] (book) [u] → [mou] (honey)

[e] → [jae] (goes) [o] → [gao] (sing a song)

Consonant:

When the lungs originated air passes through the trachea and mouth it encounters obstruction in the area of mouth and throat and this obstruction creates consonant phonemes. Rechards et al. (1987) defines consonant in this way – consonant is a speech sound where the air stream from the lungs is either completely blocked(stop);partially blocked(lateral);or where the opening is narrowing that the air escapes with audible friction(fricative).With some consonants(nasal) the air stream is blocked in the mouth but allowed to escape through the nose.

Monjur Morshed(1985) refers that when the consonants are formed, audible morphemes are produced. With obstruction as well as friction, the air passes through the mouth.(p:215)

Stop/plosives

In the science of linguistics , a stop, also known as a plosive, is an oral occlusive, a consonant in which the vocal tract is blocked so that all airflow ceases. The occlusion may be made with the tongue (blade /t/, /d/), or soft palate /k/, /g/), lips (/p/, /b/), or glottis (/ʔ/).In the articulation of the stop, three phases can be distinguished:

Catch: The airway closes so that no air can escape (hence the name *stop*).
Hold or occlusion: The airway stays closed, causing a slight pressure difference to build up .
Release or burst: The closure is opened. The released airflow produces a sudden impulse causing an audible sound, or *burst*

Fricative/sibilants

When air stream makes friction, passing away from mouth then fricative sounds are created and in this case air passes through a narrow way. Air is originated from lungs. Sibilance is a manner of articulation consonants, made by directing a stream of air with the tongue towards the sharp edge of the teeth, which are held close together. A consonant that uses sibilance may be called a sibilant. The symbols in the International Phonetic Alphabet used to denote the sibilant sounds in these words are, respectively, [s] [z] [ʃ] ,[h]. In the alveolar hissing sibilants [s] and [z], the back of the tongue forms a narrow channel (is *grooved*) to focus the stream of air more intensely. In case of producing palatal[ʃ] the body of the tongue touches the hard palate(the root of mouth). These sounds are called sibilant fricatives in standard Bangla.

Lateral

Lateral sounds are produced when the air goes away through both side of the tongue. In standard Bangla [l] is lateral sound.

Trill//rolling

The alveolar trill is a type of consonantal sound, and the symbol is r. It is commonly called the rolled r, rolling r, or trilled r. This sound is formed when the lungs originated air makes a contact with tongue/uvula.Its manner of articulation is trill, which means it is produced by directing air

over the articulator so that it vibrates.Its phonation is voiced, which means the vocal cords vibrate during the articulation.It is an oral consonant, which means air is allowed to escape through the mouth only.

Flapped/retroflex

Flapped/retroflex sounds are created when the air makes a connection with the opposite side of the tip of tongue and the teeth ridge. In standard Bangla [ɽ] and [ɽh] are flapped sounds.

Labial

Sounds in which the airflow is modified by forming a constriction between the lower lip and the upper lip are referred to as bilabial sounds. In Standard Colloquial Bangla/p/,/ph/,/b/,/bh/ are known as labial sounds.

labio-dental

Sounds in which there is a constriction between the lower lip and the upper teeth are referred to as labio-dental sounds. In Standard Colloquial Bangla,there is no labio dental sounds.

dental

Some phones are produced with the tongue placed against or near the teeth. Such sounds in which there is a constriction between the tip of the tongue and the upper teeth are referred to as dental sounds. In Standard Colloquial Bangla /t̪/ , /t̪h/, /d̪/, /d̪ɦ/ are dental sounds

alveolar

The tongue touches or is brought near the alveolar ridge in the production of certain sounds. Sounds in which there is a constriction between the blade or tip of the tongue and the alveolar ridge are called alveolar sounds. In Standard Colloquial Bangla /n/,/l/,/r/,/s/ are alveolar sounds.

Palato-Alveolar

Just behind the alveolar ridge, the roof of the mouth rises sharply. This area is known as the palato-alveolar or post alveolar (and alveopalatal in some books) area.Sounds in which there is a constriction between the blade of the tongue and the palato-alveolar (or post-alveolar) are called palato-alveolar sounds.In Standard Colloquial Bangla,/t/,/th/,/d/,/dh/ are called palate alveolar sounds.

Palatal

The highest part of the roof of the mouth is called the (hard) palate.
Sounds in which there is a constriction between the front of the tongue and the hard palate are called palatal sounds. In Standard Colloquial Bangla,/c/,/ch/,/j/,/jh/ are known as palatal sounds.

Velar

Sounds in which there is a constriction between the back of the tongue and the velum are called velar sounds. In Standard Colloquial Bangla /k/,/kh/,/g/,/gh/,/ ŋ /are called velar sounds.

Nasal

David Crystal (1992) says- “Nasal is a term used in the phonetic classification of speech sounds on the basis of manner of articulation. It refers to sounds to allow an audible escape of air through the nose”. (p:308)Both consonants and vowels may be articulated in this way. Nasal consonants occur when there is complete closure in the mouth, and all the air thus escapes through the nose. According to Abul Kalam manjur Rorshed in Standard Colloquial Bangla the number of nasalized vowels is equal to that of their oral counterparts, though the frequency of occurrence of nasalized vowels is far less than that of oral vowel. Ferguson (1968: 59) quotes on oral-nasal vowel frequency ratio of about 50 : 1

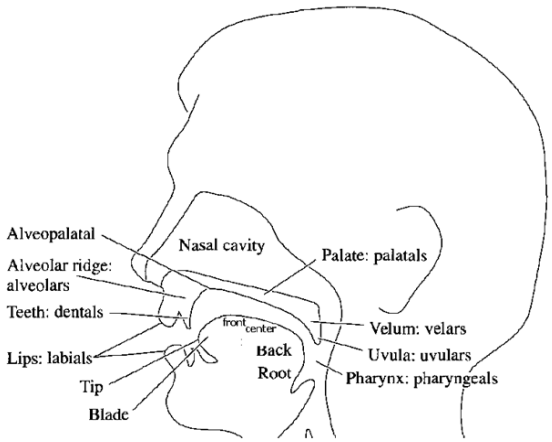

Fig1:**View of the vocal tract with places of articulation**

Aspiration

Aspiration is the pronunciation of sounds with a puff of air from the lungs. It is the burst of air that accompanies the release or closure of plosives. According to Shunitikumar Chaterjee (1998) [h] based sounds are aspirated sounds. (p:42). Dr. Sunitikumar Chatterji in his famous 'Bhasha-Prakash Bangala Vyakaran' noted that every second and fourth consonants in the five-strong Bangla 'barga' (a group of five serial sounds in alphabetic list) are aspirated while others remain un aspirated (Chatterji 1996, p. 42). In Bangla, only plosives or stops are aspirated. Fricatives are not aspirated, nor are nasals, laterals, trills and approximants.Peter Roach thinks that while the air passes away it makes delay. For this reason the delayed aspirated sounds are also delayed voiced sounds [gh,jh,dh]. [k], [p], [c], [t] are un aspirated sounds. When the un aspirated sounds are produced passing air does not make any delay and that is why un aspirated sounds are also known as instant unvoiced sounds.

Voicing

Daniul Haque (1993) says- "The air originated from the lungs goes through the trachea/wind pipe, passes the way of glottis and reaches to the mouth." (p:32).The vocal cords, or vocal folds, are a combination of muscle and ligament located within the larynx, stretching horizontally across it and attached to its cartilages, and it sits on the top of the trachea.

1. If the vocal folds are held apart, the air can flow between them without being obstructed so that no noise is produced by the larynx. When air exits the lungs and passes through laryngx and open vocal folds, the folds do not vibrate. Sounds that are produced this way are called voiceless , examples of voiceless sounds: /f/, /k/, /s/, /h/ ,/ch/,/kh/.
2. When air is forced up the trachea from the lungs, at a certain pressure it is able to force its way through the vocal cords, pushing them open. The folds are close together and tensed, causing them vibrate rapidly.. All vowels are voiced and consonants are both voiced and voiceless. Sounds produced this way are called voiced ,examples of voiceless sounds: /b/, /v/, /z/ ,/dh /,/bh/

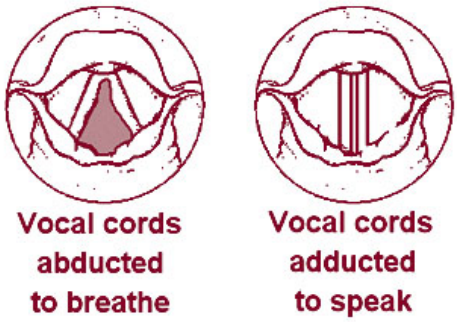

Figure 2 : Vocal Folds

Assimilation

Sukumar Sen says- “In case of articulation two proximal sounds are influenced by each other.’’(p:166) This process is called assimilation in phonology. Darid crystal (1992)says- “Assimilation is a general term in phonetics which refers to the influence exercised by one sound segment upon the articulation of another, so that the sounds become more alike or identical”. (p:38)After changing the sound influenced by another, the two sounds become alike. Assimilation is a phonological process, in which the modification of a segment, brings about similarity with another, neighboring segment in a word. Thus the value of agreement is often found in assimilation where unvoiced segments become voiced, for example [m] is unvoiced in [podmo] but often the process of assimilation [m] becomes [d] which is a voiced sound.

Glottalization

When sound carrying air-stream faces/envisages obstacle to the vocal cord, then glottal sounds are produced. In SCB [h] is only one glottal sound. (as cited in Roach; 1992 : 49)

David Crystal(1992) refers that glottal is a term in the classification of consonant sounds on the basis of place of articulation: it is a sound made in the larynx due to the closure or narrowing of the glottis, the aperture between the vocal cords. (p:203) . The larynx is commonly called the voice box. The larynx houses the vocal folds (vocal cords), which are essential for phonation. The vocal folds are situated just below where the tract of the pharynx splits into the trachea and the esophagus

The glottis is that variable opening in between the vocal folds, and it changes shape during phonation and respiration. In quiet respiration the glottis is somewhat triangular.. A huge number of puffs of air produces aspirated sounds. The pulmonic air stream on its way into or out from the lungs has to pass through the wind-pipe or tracheas, at the top of which is the complicated organ called larynx. (as cited in Abercrombie : 25)

It is the complete or partial closure of the glottis during the articulation of sound. Air is compressed in the mouth or pharynx above the glottal closure and the air is released while the breath is still held. In summary, it can be said that when the glottalic sound for example [h] is produced the glottis is closed/narrowed; the air compressed in the mouth/pharynx; the air is stirred in the area of larynx and the root of the tongue helps in the entire process.

Glottal Stop

The glottal stop is a type of consonantal sound used in many spoken languages, produced by obstructing airflow in the vocal tract or, more precisely, the glottis. The symbol in the International Phonetic Alphabet that represents this sound is ⟨ʔ⟩.Its manner of articulation is occlusive, which means it is produced by obstructing airflow in the vocal tract. Since the consonant is also oral, with no nasal outlet, the airflow is blocked entirely, and the consonant is a stop. Its phonation is voiceless, which means it is produced without vibration of the vocal cords; necessarily so, because the vocal cords are held tightly together, preventing vibration. The

airstream mechanism is pulmonic, which means it is articulated by pushing air solely .

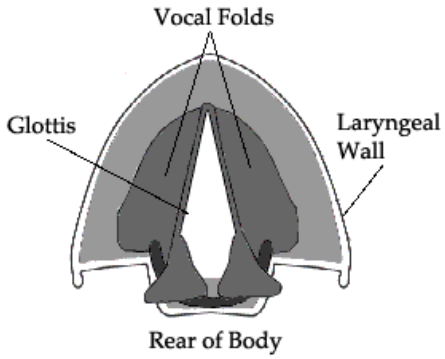

Figure3: glottis

Consonant Clusters

David Crystal(1992) says- "Cluster is a term used to refer to any sequence of adjacent consonants occurring initially/medially/finally in a syllable.''(p:77) In consonant clusters, adjacent consonants may not be identical .Rules proposed by Abul Kalam Monjur Morshed.

C1c2- s+ any stop+/r/ :[s + r]- [srantɟ]-comfort; [s+ ʈ] [nasʈa] -food

C1c2-any stop+/r/ or/l/ :[ɖ+r] –[ɖrirɔ]-determined ; [k+l]- [klanʈɔ] -tired

Shuchorita Bandapaddhai (2005)defines consonant clusters in this way.

"If two adjacent consonants are articulated with same emphasis then, consonant cluster is created".(p:23). According to her statement there are 250 consonant clusters in Bangla language but specifically there are 36 consonants. Plosive + nasal : [j + n] [khajna]-tax; plosive+ lateral: [b+ l] [ʈɔbla]-music instrument.Plosive + rolling: [ɖ ɦ+ r] [ʃuɖ ɦrano]-correction; Plosive + retroflex: [k + ʈ] [nekʈe]-wolf; Plosive + fricative: [d + ʃ] [badʃa]-king; Sibilant + any consonant: [ʃ + k] [poriʃkar]-clean; liquid + any consonant: [l + n] [alna] –almira; retroflex + any consonant:[porɟi]-falling; nasal + any consonant: [n + bh] [bonbhojon]-picnic

Medial consonant clusters are frequent in SCB. The stops in SCB occur in systematic articulatory order; un aspirated sound is followed by an aspirated sound (i.e. [p+ph], [t+th], [t+th], [c+ch], and [k+kh] and the voiceless sounds are followed by their unvoiced counterparts (i.e. [b+bh], [d+dh], [ɖ+ ɖ ɦ], [j+jh], [g+gh].(as cited inFerguson, 1962 : 31)

[c+ch] → [ʃɔcchol] solvent

[ʈ+ ʈh] → [uʈʈhan] restoration

[ɖ+ ɖh] → [u ɖɖhar]rescue

Gemination

Abul kalam Monjur Morshed defines that the most familiar assimilatory process in SCB is found in the gemination (two identical consonant) of consonants. The process shows both progressive and regressive. David Crystal (1992)says- "Gemination is a term used in phonetics and phonology for a sequence of identical adjacent segments of a sound in a single morpheme". (p:196)SCB – follows gemination in words for example.

[hoʈʈa] – assassination

[laddu] – sweet

Because of the syllable division, a geminate sequence can not be regarded as simply a long consonant and transcriptional differences usually indicate this, e.g [tt] or [dd] is geminate and [t :] or [d :] is long.Moreover, these long segments of sound can not be separated by epenthetic vowels (insertion of vowel within a single morpheme).

True geminates are contrasted with fake or apparent geminates where identical segments have been made adjacent through morphological concatenation (chain) ,for exampleʃobbai: all people, chotto : small ,eʈʈotuku : little

In the above mentioned examples [b], [t] , [ʈ] are uttered twice staying side by side and these phonemes make emphasis while making a morpheme.

According to Abul Kalam Monjr Morshed, in case of gemination long consonants have phonetic occurrence under certain conditions. Preceding consonantal segment is always longer than the following one. This contrast is significant in geminated consonants. All the consonantal segments except [r] and [h] can be geminated in SCB (Standard Colloquial Bangla).Abul Kalam Monjur Morshed identifies possible types of gemination in SCB: [p+p] [khoppor]-clutches;[b+b] [kabbo]- poem , [ʈ+ʈ] [moʈʈo]-exultant; [ɖ+ɖ] [biɖɖa]-knowledge;[t+t] [thatta]-

jock, [d+d] [laddu]-sweet;[c+c] [gocca]- compensation;[j+j[bhojjo]-edible; [k+k] [tekka]-[competition/race] ;[g+g] [joggo]-qualified; [m+m] [ʃommukh]-front,;[n+n] [bonno]-wild, [ʃ+ ʃ] [bi ʃʃo]-globe , [l+l] [kella]-fort.

Spirantization

According to Sukumar Sen Spirantization is a term when stops are articulated like sibilants. i.e. the air stream takes time while passing away from the mouth (p:47)It occurs when the bilabial /p/,/b/and palatal /c/,/ch/, /j/are replaced by spirants /f/, /s/, /z/.The front part of the tongue touches the hard palate and produces palatal sounds like /c/, /ch/, /j/

Methodology

The current paper presents an analytical research regarding the sound patterns of Standard Colloquial Bangla and Netrokona Dialect. In order to conduct this research I have chosen a number of words which are my study materials. Then I had to go to my study place i.e. Netrokona town. I selected the village Jithon where I collected sound patterns of five people who are my study respondents. The standard form of the words was uttered and then they uttered the same words in their own style. Through this way I collected data. This entire procedure took two days for inconvenience of electricity.

Data Collection

My research work is entirely based on analysis of particular data. Firstly I jotted down lots of words and analyzed those considering the phonological criteria for example allophones etc. Finally I selected a number of words as my study materials. With the help of these selected words, I went to my study place. My study informants positively responded to this study. They to some extent seemed to be enthusiastic as I wanted to come to know their pronunciation as the elements of my study. I had to make them understand the significance of local language. In true sense, the informants helped me cordially while collecting data (sound pattern of dialect).

Data Analysis

I have analyzed the data by keeping in mind several phonological components. I arranged the data by using several tables so that the findings can be lucid and comprehensible.. Through the analysis I got particular phonemes of Netrokona dialect which hold phonological characteristics exclusively. This research is qualitative as well as quantitative. I have used a number of words as my study materials . Moreover I came to know different phonological criteria while studying the sound patterns of the words. The respondents of my research work are given below:

Name	Age	Occupation
Md. Atikur Rahman	42	service holder
Md Shobuj	40	farmer
Md Sultan	46	farmer
Bayejid Tasnim	25	student
Ashraf Dawood	53	service holder

Among these participants, who live in the village(farmer) produced the original sound pattern of Netrokona Dialect. The respondents who are in service produced a little bit standard form of Bangla. The only participant who is a student uttered both standard Bangla and the dialectal form of Bangla Language.

Diphthongs in SCB andNetrokona Dialect

SCB	ND
/u/- [uo]-[kuo](well)	/u/- [ua] [kaua](crow)
/a/[*ae*][ba e](left) [au][chauni](shed)	/a/-[ai]- [t̪ain](he/she) [*ao*]- [aon](come)
/o/[*oe*][d̪ɦoe](wases) [*oa*][dhoa](smoke)	/o/-[oi]- [goiob](guava) [*ou*]- [houri](mother in law) [*oa*]- [roa](plant of paddy)
[ɔ][ɔe [jɔe](victory)	/ ɔ /-[ɔ i]- [lɔin] (lets go) [ɔo]- [ɔon] (being) [ɔa] - [lɔa](iron)
i/-[ii][nii](take) [ie][gieche](gone) [i ɔ][niɔm](rule)	/i/-[ia]- [hial](fox) [*iu*]- [biug](substruction)
/e/-[ee][mee](girl) [*eo*][preosi](beloved)	/e/-[ei] [heida] that

Diphthongs is a common criterion of Standard Colloquial Bangla and Netrokona Dialect. In Netrokona dialect, insertion of /i/ or /u/ in a word makes diphthong for example [biog]-[bi*u*g]; [peara]-[goiob].Contact vowels by epenthesis are real diphthongs(as cited in Kakati1972:148). Glottal /h/ is common in Netrokona dialect like [sial]-[hial]. In case of this dialect aspirated /gh/ becomes non aspirated/g/ for example[ghumabo]-[gumaiam. Using same vowel phoneme SCB forms distinctive diphthongs like[ii],[ee],[ie],[uo] etc whereas ND forms [ua],[ai],[au].

Semi-vowels in SCB andND

SCB	ND
/o/-[jao] (go)	Non existent
/i/-[boi](book)	/i/ -[bilai] Cat
/a/-[moa] Cake made of puffed rice	/a/ [bia] Marriage
/e/-[jae] (goes)	non existent
/u/-[mou] (honey)	non existent

Semivowels are common in Standard Colloquial Bangla and Netrokona Dialect. Semi vowels are not fully structured vowel. They can not make letter/syllable. They are pronounced before they are prominently structured. There are five semi vowels in SCB :/i/,/u/,/a/,/o/,/e/. Whereas in Netrokona Dialect there are only two semi vowels:/i/,/u/.

Nasalization in SCB and ND

ND	SCB
/i/ [isa] Shrimp	/i/ [iḍur] Rat
Non existent	/e/ [kecho] earthwarm
/ae/ [baeha] Curved	/ae/ [dhaera] [beating of a drum]
/a/ [adu] Knee	/a/ [phaḍ] [trap]
Non existent	/o/ [ḍ̤hoa] [smoke]
/u/ [uʃ] Sense	/u/ [kuri] [bud]
/ ɔ / [fɔsa] rotten/spoled	/ ɔ / [biʃɔḍ] [in detail]

In both SCB and Netrokona dialect the number of nasalized vowels is equal to their oral counterparts. In Netrokona dialect /e/ and/o/ ate non existant . While nasal sounds are produced lungs originated air passes through nasal cavity . When the nasal sounds are formed the velum is lowered. Use of oral vowels are more frequent in SCB than their oral counterparts

Aspiration andNon-aspiration in SCB and ND

Rules	SCB	ND	Glosses
/kh/-/k/	[pokkho]	[pɔkko]	ripe
/th/-/d/	[kathal]	[kadol]	Jackfruit
/bh/-/b/	[lav]	[lab]	Profit
/gh/-/g/	[ghori]	[gori]	Watch
/ɖ̤h/-/ɖ̤/	[ɖ̤har]	[ɖ̤ar]	Lend
/ph/-/p/	[laph]	[lap]	Jump
/dh/-/d/	[dhakna]	[dahun]	Cover

Non aspiration is a common feature in Netrokona Dialect where aspirated /kh/, /th/, /bh/,/gh/, /dh/,/ph/, are changed into un aspirated /k/, /d/, /b/, g/, p/ etc. Aspiration is a common feature in Standard Colloquial Bangla. The bilabial plosives are produced with the two lips pressing against each other and then with sudden release of air with a plosion. In Bangla there are four bilabial plosives: /p/, /p^{h}/, /b/ and /b/. /bh/.Dental plosives are produced with the front of tongue touching the back of upper teeth and suddenly releasing the air with a plosion. There are four dental plosives in Bangla: /t/, /th/, /d/, /and/, /dh/. Alveolar plosives* are produced with the tip of tongue touching the alveolar ridge and then suddenly releasing air with a plosion. In Bangla there are four alveolar plosives: /t/, /t^{h}/, /d/ and /dh/.Velar plosives are produced with the back of the

tongue touching velum or soft palate and sudden release of air with a plosion. Bangla has four velar plosives: /k/, /k^{h}/, /g/ and /g h/.Palatal plosives are produced with the mid of tongue touching the hard palate and sudden release of air with a plosion. Bangla has four palatal plosives*: /c/, /c h/, /j/ and / jh/.

Voicing in SCB and ND

SCB	***ND***
/ ɖ̤h/-[ɖ̤han] Paddy	/p/-/b/ [bisun] fan
/gh/-[g hono] Thick	/t/-/d/ [bodi] knife
/ bh /-[nobho] sky	/th/-/d/Stick [ladi]
/jh/- /bo**jh**a/ Load	/k/-/g/ [daeg] Pan

Voicing is natural in Standard Colloquial Bangla and Netrokona Dialect. In Netrokona Dialect voiceless /p/,/t/,/th/,/ch/ are being changed into voiced/b/,/d/,/g/,/d/ . SCB forms voiced sounds using /dh/,/gh/,/bh/,/jh/.While forming voiced sounds vocal cords are vibrated.

Assimilation in SCB and ND

SCB	ND
/m/-/ d̪/ [pod̪ma] – [pod̪̪da] river	/r/-/b/ [ʃɔbbonaʃ] Alas
/m/-/t/ [atma]-[atta] Soul	/ʃ/-/c/ *[pɔccim]* *West*
/r/-/m/ [d̪̪hormo] -[d̪̪hommo] Religion	/r/-/n/ [ʃɔnno] Gold
/r/-/t/ [korta]-[kot̪̪a] Lord	/r/-/t̪/[bot̪̪i] Admission

Netrokona Dialect follows regressive assimilation where the preceding consonant is changed by the following consonants and the assimilatory process is the substantial feature of germination of consonants where after changing one of the consonants , two consonants become identical. Standard Colloquial Bangla follows both regressive and progressive assimilation. In progressive assimilation the following consonant is changed by the preceding consonant.

Glottalization in SCB andND

Rules	SCB	ND	Glosses
/p/-/h/	[picchil]	Hisla	Slippery
	[dupur]	[duhɔr]	noon
	[kapor]	[kahɔr]	cloth
/ʃ/-/h/	[ʃiŋ]	[hiŋ]	Horn
	[ʃere]	[haira]	finished
	[ʃotti]	[hasa]	true
	[ʃoʃur]	[hour]	father inlaw
	[ʃak]	[hag]	vegetable
/j/-/h/	[jha ɽu]	[hasun]	mop
/k/-/h/	[ʃ ɔkal]	[ʃɔhal]	Morning
	[dokan]	[duhan]	shop
	[boka]	[bɔha]	rebuke

The glottalization feature is quite common in Netrokona dialect where bilabial /p/, alveolar/s/, palatal /jh/, velar/k/are changed into glottal /h/. The glottalic sound for example /h/ is produced when the glottis is closed/narrowed; the air compressed in the mouth/pharynx; the air is stirred in the area of larynx and the root of the tongue helps in the entire process. In SCB /h/ forms different morphemes of its own i.e without changing any other consonant for example [ha ʃ i](laugh)/[ha ʃ].

Glottal Stop in Netrokona Dialect

	Glottal stop	SCB	ND	glosses
	/h/-/ʔ/	[holud]	[ʔldi]	tarmaric
		[hat]	[ʔt]	hand
		[hoi]	[ʔi]	is

The glottal stop is a type of consonantal sound used in many spoken languages, produced by obstructing airflow in the vocal tract or, more precisely, the glottis. The symbol in the International Phonetic Alphabet that represents this sound is /ʔ/.Its manner of articulation is occlusive, which means it is produced by obstructing airflow in the vocal tract. Its phonation is voiceless, which means it is produced without vibration of the vocal cords; because the vocal cords are held tightly together, preventing vibration.In Netrokona Dialect it is very frequent in use where the air flow is obstructed in the vocal tract i.e it can not pass through the tract and this occlusion creates this stop glottalic sound. In SCB glottal stop is not found generally

Consonant Clusters in SCB and Netrokona Dialect

Nasal +any consonant

SCB	ND
[ŋ + ʃ]	[n+j]
[ʃ ɔ ŋ ʃ ɔe]	[hainjabala] evening
hesitation	[n+h]
	[kunhano] where
[n+k]	[n+g]
[ankora] quite fresh	[baingun] brinjal

Both Standard Colloquial Bangla and Netrokona Dialect follows the rules of consonant clusters.Nasal+any consonant such as fricative / ʃ /,plosive/k/,glottal/h/. Using this rule .SCB and ND forms different lexicons with different meaning. These phonemes are un aspirated i.e there is no puff of air during word formation except /ʃ/ and this sound is a hissing , sibilant sound. Medial cluster is evident in this regard.

plosive + plosive

SCB	**ND**
[t+p] [atpoure]	[k+kh] [aekkhano] Together
[j+gh] [ʃajghɔr] dressing room	[t+k] [loitka] hang Hang
[gh+ ɖ̪] [majh ɖ̪oria] middle of the sea	[g+t] [baegti] all the things

Standard Colloquial Bangla and Netrokona Dialect follows consonant clusters by using the rule of plosive+plosive. This plosive sounds are both aspirated and un aspirated in nature. Above the mentioned examples present voiceless sounds . Only/g/ and /gh/ are voiced sounds. Medial cluster is common in this case.

plosive + nasal

SCB	ND
[gh+n] [bighno] obstacle	[k+n] [fakna] Ripe

By using the rule of plosive+ nasal SCB and ND create consonant clusters. By following identical rule ,SCB and ND form different words of different meaning. The phonemes are un aspirated except /gh/.

plosive + rolling

SCB	ND
[k+r] [chokra] Boy	[b+r] [zabrae] Embrace

Plosive+ Rolling is another rule of consonant clusters in SCB and ND. Any plosive sound and rolling/r/ jointly form words of different semantic feature. Phoneme /b/ is voiced, un aspirated and/k/ ,/r/ are un aspirated.

plosive + lateral

SCB	ND
[p+l] **[aplu ʈo]** **overwhelmed**	**[g+l]** **[hogle] just now** **[b+l]** **[khabla]** **snatch**

Standard Colloquial Bangla and Netrokona Dialect follow the rule of plosive + lateral sound.These phonemes are un aspirated. /g/,/b/,/l/ are voiced in nature and these phonemes form medial cluster .

sibilant + any consonant

SCB	ND
[ʃ +c]	[ʃ+k]
[niʃcol]	[puskuni]
motionless	Pond

Sibilant / ʃ/ and any consonant like /c/,/k/ form consonant clusters in Standard Colloquial Bangla and in Netrokona Dialect. Medial cluster is common in this regard.

Lateral+any consonant

SCB	ND
[l+ ʈ]	**[l+ ɖ]**
[alʈo bhabe]	[?l ɖi]
lightly	Tarmaric

Lateral /l/ and any other consonant like / ʈ/ or / ɖ/ form consonant cluster in SCB and ND. In Netrokona Dialect glottal stop/?/ is created during consonant clustering.

Gemination in SCB and ND

Rules	**SCB**	**ND**
/k+k/	[pɔkko] matured	[sukka] Sour
/n+n/	[binnaʃ] equal division	[beinna] morning
/t+t/	[ɔttalika] palace	[aitta] walking
/l+l/	[kella] fort	[zoilla] Burn
/ʃ + ʃ/	[aʃʃaʃ] Hope	[maiʃʃa] month's
/ ʈ+ʈ/	[moʈ ʈo] exultant	[fuiʈ ʈa] lying
/b+b/	[kabbo] Poem	[kobbor] grave
/ ɖ+ ɖ/	[uɖ ɖan] Park	[khuiɖ ɖa] excavation
/j+j/	[bhojjo] Edible	[kaijja] Quarrel

/d+d/	**[bɔddo] Very**	**[bɔdda] Elder**
/g+g/	[ʃɔggan]self sense	[abaigga] Hapless
/m+m/	[ʃommukhin] encounter	[laimma] getting down
/c+c/	[uccarɔn] pronunciation	[beicca] Selling
/p+p/	[ʈ̪happoɲ] slap	[maippa] measure

Gemination is a common phonetic feature in Stadard Colloquial Bangla and Netrokona Dialect. Nasalization occurs in some cases like[hete]-[aitta], [khude]-[khuidda]. However velar/k/, /g/;alveolar/n/;palate alveolar/t/ ,/d/,bilabial/b/,/m/,palatal/c/,/j/, lateral/l/, sibilant/s/ are common in the formation germination in ND. Standard Colloquial Bangla forms different morphemes using same phonemes like using /t/ or /d/ SCB forms [boddo]/[ɔttalika] etc.

Spirantization in ND

Rules	SCB	ND	Glosses
/p/-/f/	[apni] [kopal]	[afne] [kofal]	You fore-head
/c/-/s/	[cor] [cithi]	[sur] [sidi]	thief letter
/ch/-/s/	[chala]	[sala]	Sack
/j/-/z/	[ʃoja]	[ʃuza]	Straight

Spirantization is a common feature in Netrokona dialect where the SCB bilabial/p/, and palatals /c/,/ch/,/j/ are replaced by three spirants/f/,/s/ ./z/ In SCB spirantization does not occur generally. While spirant sounds are formatted there the air passes through a narrow space and it makes a hissing sound.

My study participants produced sounds naturally and spontaneously. I found several uncommon dialectal morphemes and in those words I got distinctive use of phonemes.I wrote down as well as recorded those words instantly. After completing data collection, I went through the collected data carefully and got the new dialect oriented morphemes.

Findings

Inventory of Consonant Phonemes in SCB

	Bilabial	Dental	Alveolar	Pala to alveolar	Retroflex	Palatal	Velar	Glottal
Plosives/Stop	[p] [ph] [b] [bh]	[t] [th] [d] [dh]		[t] [th] [d] [dh]		[c] [ch] [j] [jh]	[k] [kh] [g] [gh]	
Nasal	[m]		[n]				[ŋ]	
rolling/trill			[r]					
flap/tap					[ɽ];[ɽh]			
spirant/fricative			[s]			[ʃ](k)		[h]
lateral			[l]					

There are 30 consonant phonemes in Standard Colloquial Bangla. Voiced aspirated sounds are /gh/,/jh/,/dh/,/ ɖ̤h/,/bh/.Voiced unaspirated sounds are /g/,/j/,/d/, /ɖ̤/b/.Voiceless aspirated sounds are/kh/,/ch/,/th/,/ ʈ̤h/,/ph/.Voiceless un aspirated sounds are /k/,/c/,/t/,/ ʈ̤/,/p/.Retroflex sounds are common in SCB where the opposite side of the tip of the tongue touches lightly the teeth ridge.

Inventory of Consonant Phonemes in ND

	Bilabial	Labiodental	Dental	alveolar	Palato alveolar	Palatal	Velar	glottal
Plosives/Stop	[p] [b]		[ʈ̤] [ɖ̤]		[t] [d]	[c], [j]	[k], [kh], [g]	
Nasal	[m]			[n]			[ŋ]	
rolling/ticill				[r]				
flap/tap								
spirant/fricative		[f]		[s], [z]		[ʃ]		[h]
lateral				[l]				

There are 22consonant phonemes including labio dental/f/ and glottal stop/?/. Voiced aspirated sounds for example /gh/,/jh/,/dh/,/dh/,/bh/and voiceless aspirated/ph/ are not present in Netrokona dialect. Labio dental/f/, alveolar/s/, z/, glottal stop/?/ are evident in Netrokona Dialect.Voiceless un aspirated phonemes of Netrokona Dialect: /k/,/c/,/t/,/ ʈ̤ /,/p/.Voiced un aspirated phonemes of Netrokona Dialect: /g/,/j/,/d/,/ ɖ̤/,/b/. Voiceless aspirated phonemes of Netrokona Dialect: /kh/. Retroflex sounds are not present in Netrokona Dialect.

Conclusion

Language is the mode of daily communication. Without language we can not think of a single moment. Communication is the part and parcel of human life. Nothing can possible without communication. Language and society are inter connected , these two aspects of human life are reciprocal in nature. Language makes society or vice versa. As the educated mass of the on going society we have to use Standard Colloquial Bangla in almost all of the formal official contexts. (social/political/economical). Dialect is nothing but the variety of the standard language. To speak the truth dialect creates within the environment i.e. it creates naturally. People from rural areas can produce the real dialectal pattern. The setting/context is not so huge and that is why they can communicate themselves intimately using the original dialect. They are not aware of prestige, status, formality. An educated person of the same region where people use dialect spontaneously has to encounter different settings, guys, activities. He /she has to use SCB in the official context, and normal social dialect(casual but urban like) in informal context(with family and friends). Dialect reflects our heritage, culture, regional identity. With the passage of time dialects are getting non existent. People are getting so busy, engaged as well as occupied with lots of social (formal) responsibilities that they can not enjoy their local language. More over people who are little educated throng to the urban area and mix with the urban nourished people. Gradually this urban bound groups are accustomed to the urban like language. They eventually are separated from the rural touch. With a view to presenting the specialty or regional dialect I conducted this research through which I would get authenticity of local language. There has been no study regarding phonological analysis of SCB and Netrokona Dialect. I hope this study will provide substantial phonological information.

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