Phonological Inventory of Chandipuri Dialect of Naogaon District, Bangladesh

Submitted by-
Momota Hena
ID: 192-10-2087
Spring 2023

A research paper submitted in Partial Fulfilment
of the Requirements for the Degree of
BA (Hons) in English

Faculty of Humanities & Social Science
Department of English, Daffodil International University
Ashulia, Savar

Supervised by -
Dr. Md. Mostafa Rashel
Associate Professor, Department of English
Daffodil International University

June 2023

Phonological Inventory of Chandipuri Dialect of Naogaon District, Bangladesh

Letter of Approval

The thesis titled *Phonological Inventory of Chandipuri Dialect of Naogaon District, Bangladesh* authored by Momota Hena, bearing ID: 192-10-2087, has been prepared and submitted as a partial fulfillment of the requirements for the Research paper. After examination, it is recommended for approval and acceptance.

Dr. Md. Mostafa Rashel
Associate Professor, Department of English
Daffodil International University

Declaration

This is to declare that my research paper titled ***Phonological Inventory of Chandipuri Dialect of Naogaon District, Bangladesh*** submitted to the Department of English, Daffodil International University, for the partial fulfillment of the requirements of the degree of Bachelor of Arts in English is an authentic record of my thesis. paper done by me under the supervision of Dr. Md. Mostafa Rashel, Associate Professor of English, Daffodil International University. I also declare that this thesis paper has not been previously submitted to any other university.

Momota Hena

Momota Hena
ID: 192-10-2087
Spring Semester 2023

Acknowledgements

I would like to express my sincere gratitude to my respected supervisor, Dr. Md Mostafa Rashel, associate professor of the Department of English at Daffodil International University. His valuable time and thoughts guided me throughout the research as well as providing valuable insights into methodology. All his valuable suggestions and feedback greatly enriched my ideas and thoughts, enabling me to produce this paper with a high level of clarity. His guidance, unwavering support, and inspiring presence were essential to the initiation of this research endeavour. I extend my sincere thanks to the native speakers of the Chandipuri dialect, who generously shared their time, knowledge and language skills. Their participation and cooperation was invaluable in providing the necessary data for this study.I would like to express my sincere thanks to my friend Alfe Sani Tajim who helped me a lot in this research and always supports and encourages me to work. I am also thankful to all my well-wishers who wises me luck and prays for my good works.

Preface

I dedicate this work from the bottom of my heart to my precious mother Masuda Begum and my friends who are always by my side and support me as well as motivate me to complete this task.

Abstract

The Chandipuri dialect of Naogaon district is known for its uniqueness. Phonological, syntactic and morphological features. This research paper especially focused on analysing the phonological features of Chandipuri dialect. Consonants are examined based on their place and manner of articulation, Using different rules and tests such as minimal pair selection test, contrast test. During research seven verbal vowels and twenty-six consonants are identified in the Chandipuri dialect. The research mainly focused on analysing each single consonant phoneme and Vowels sound differently. This analysis seems to have many unknown characteristics of different consonant sounds are highlighted compared to regular Bengali dialect.

Contents

List of Figures and Tables

Chapter One

General description of Naogaon District

1.1 Introduction

Naogaon is a district of Bangladesh which was one of the subdivisions of the erstwhile Rajshahi district. Naogaon district is located in the northern part of Bangladesh. Naogaon is a district of the oldest civilization of the world before Buddha. On 1 March 1984 it was upgraded to a district. It is believed that the present district headquarters was originally built in a mauza consisting of nine villages.That is why it is called *Nao* which means nine in English And *Gao* which means village in English. The local language of Naogaon is little bit different from the official Bangla language and people of Naogaon call it *Naogaonr Ancholic bhasha*. According to the 2022 census of Bangladesh, Naogaon District has a population of 2,784,598. The rural population was 23,67,087 while the urban population was 4,16,243. Almost everyone from the rural population uses the local language and most of the people from urban areas also use the local language when they speak with the local people. The regional language of Naogaon, Chandipuri Dialect which is spoken by the masses with a broad rural background has its own characteristics. Here the words *hami* or *mui* are used instead of *ami*. *Boithokkhana* is used as *khola.*Here most Bengali words which sound like 'n' are used as 'l' sound. For example*: Notun-Lotun, Nouka-Louka, Nouga-Louga*

Chapter Two

Previous Works on Chandipuri Dialect

2.1 Literature Review

Apart from Bengali, there may be other minority languages spoken in Naogaon, such as Saotali or Oraon, which are spoken by some of the indigenous communities living in the region. However, these languages are not as widely spoken as Bengali.Overall, Bengali is the primary language spoken in Naogaon, and is used for daily communication, education and government functions. There has been work on Phonetic inventory on Santali language which is done by Sohan Mia. But when it is about Naogaon's local language, specifically Chandipuri Dialect, there is not that much work on it. Although a lot of work has been done on the regional languages of different districts of Bangladesh, not much work has been done on the regional languages of Naogaon the neighbouring regional languages around Naogaon district.

2.2 Research Questions

This paper aims to Phonological analysis of Chandipuri dialect.

- What are the consonants and vowels present in the Chandipuri dialect?
- What are the phonetic characteristics of these sounds?

Chapter Three

Research Methodology

3.1 Methodology

Phonological features of Chandipuri dialect had described by some qualitative methodologists. Qualitative methodology was adopted to conduct the study. Primary and secondary sources had been used to carry out the research. A well-formed questionnaire was used to collect data from face-to-face interviews. Data was collected from a group of participants who are native speakers of Chandipuri dialect. The research had been done with different age groups. By doing this, it had been easy to understand how the pronunciation rules change for people of different ages. In addition, since the emphasis was on quality in this research, better results had been obtained by surveying a small number of individuals. Various methods such as recordings of speech samples, interviews or elicitation tasks had been used to collect the data. Participants' speech had been recorded using a high-quality microphone and software. Participants had been asked to read out a list of words or sentences to elicit specific sounds. The collected data had been transcribed using the International Phonetic Alphabet (IPA). Through this research a comprehensive understanding of the phonology of the languages of the Chandipuri Union region has been obtained. For which at least 4-5 months had been required to complete the research. In the case of research, I had been definitely do the entire analysis keeping in mind the sociological and environmental aspects of the Chandipur region so that the reason for this dialect difference had been discovered as well.

3.2 Objectives

Analysing the phonological pattern of the Chandipuri dialect spoken in Chandipur Union of Naogaon is the main objective of this study. The research being conducted specifically intends to achieve the three objectives:

- Understanding the phonemic status of the different sounds of this dialect.

- Finding out the contrastive distribution of sounds of this dialect.

- Discovering the level of difference can be found in the phonetic inventory in this dialect compared to other dialects.

Chapter Four

Phonological Analysis of Chandipuri Dialect

Dialects are variations of a language. It is created through the modification of a language on phonological aspects, morphological and syntactical issues. Articulation patterns, phonetic features, phonological inventory and processes are analysed in this study through detailed analysis of voice samples from local speakers.

4.1 Consonants of Chandipuri Dialect

While producing a sound if there is some sort of obstruction in the vocal tract or mouth then the sound is called Consonant. Though Chandipuri Dialect is created by the people of Naogaon district, this dialect has 26 consonants and those are: /k/,/kʰ/,/z/,/zɦ/,/l/,/ɖ/,/ɖɦ/,/p/,/f/,/g/,/gɦ/,/m/,/ʃ/,/ʈ/,/ʈʰ/,/n/,/c/,/cʰ/,/h/,/b/,/bɦ/,/t/,/tʰ/,/d/, /dɦ/,/r/. According to place of articulation and manner of articulation the consonants of Chandipuri dialect are discussed below:

According to the feature matrix, the consonants of Chandipuri dialect can be mentioned in the following way,

Manner of Articulation→ Place of Articulation↴	Signs of Sounds	Plosive	Nasal	Rolling	Retroflex	Fricatives	Lateral	Voiced	Aspirated
Bilabial	/p/	+	-	-	-	-	-	-	-
	/b/	+	-	-	-	-	-	+	-
	/bʱ/	+	-	-	-	-	-	+	-
	/m/	+	+	-	-	-	-	+	-
Dental	/t̪/	+	-	-	-	-	-	-	-
	/t̪ʰ/	+	-	-	-	-	-	-	+
	/d̪/	+	-	-	-	-	-	+	-
	/d̪ʱ/	+	-	-	-	-	-	+	+
Labeo Dental	/f/	-	-	-	-	-	-	-	+
Alveolar	/n/	+	-	-	-	-	-	+	-
	/l/	-	-	-	-	-	+	+	-
	/z/	-	-	-	-	+	-	+	-
	/zʱ/	-	-	-	-	+	-	+	+
Palatal	/c/	+	-	-	-	-	-	-	-
	/cʰ/	+	-	-	-	-	-	-	+
Palato alveolar	/t/	+	-	-	-	-	-	-	-
	/tʰ/	-	-	-	-	-	-	-	+
	/d/	+	-	-	-	-	-	+	-

	/dʱ/	+	-	-	-	-	-	+	-
	/r/	-	-	-	+	-	-	+	-
	/ʃ/	-	-	-	-	+	-	-	-
Velar	/k/	+	-	-	-	-	-	-	-
	/kʰ/	+	-	-	-	-	-	-	+
	/g/	+	-	-	-	-	-	+	-
	/gʱ/	+	-	-	-	-	-	+	-
Glotal	/h/	-	-	-	-	+	-	-	+

Table 1: The consonants of Chandipuri Dialect according to the feature matrix

4.1.1 Phoneme

Phoneme is a basic unit of sound in a particular language that distinguishes one word from another. It is the smallest meaningful unit of words in a language. Phonemes are the building blocks of a language's sound system and represent abstract mental representations of speech sounds. In English, the sounds /b/ and /c/ are distinct sounds because they separate words like "bat" and "cat." Changing one sound in a word can result in a different sound with a different meaning. Phonemes help to identify minimal pairs, which are pairs of words that differ in meaning by only one word. By identifying phonetic contrasts, linguists can determine which words are distinct and meaningful in a language.It lays the foundation for phonological analysis, which involves studying the sound patterns and rules of a language. Phonemes are the basic units of sound that help distinguish the sounds of a language, analyse its sound patterns, aid in language acquisition, and contribute to the advancement of speech technology.There are

some significant rules which determine the sound. These are minimal pair selection test, contrast test (i.e., initial, medial and final contrast) and Sub-minimal pair test and minimal pair choice test. Consonant sounds of Chandipuri dialect can be classified into the following groups with minimal pair test:

Initial Contrast:

i) /*m*/ /*maka*/ 'Mould'

   /*p*/ /*paka*/ 'Ripe'

   /*m*/ > /*p*/

ii) /*d*/ /*dal*/ 'Branch'

   /zʱ/ /zʱ*al*/ 'Spicy'

   /*d*/ > /ɟʱ/

iii) /*h*/ *hæmi* 'I'

   /*n*/ *næmi* 'Get down'

   /*h*/ > /*n*/

Medial Contrast:

i) /*n*/ /*ænu*/ 'Have come'

   /*l*/ /*æ͡ɛlu*/ 'Potato'

   /*n*/> /*l*/

ii) /*l*/ /*mala*/ 'Necklace'

   /ʈ/ /*maʈa*/ ' Heat'

   /*l*/ > /ʈ/

iii) /*t*/ /*æta*/ 'Ort'

   /ʃ/ /*æʃa*/ 'After coming'

   /*t*/ > /ʃ/

8

©Daffodil International University

Final Contrast:

i) */r/   /kʰær/*   'Straw'

  /p/   /kʰæp/   'Round'

  /r/ > /p/

ii) */cʰ/   /macʰ/*   'Fish'

   /l/   /mal/   'Tools'

   /cʰ/ > /l/

iii) */ʈ/   /æʈ/*   'Night'

   /k/   /æk/   'One'

   /ʈ/ > /k/

©Daffodil International University

Manner of Articulation ⇒ / Place of articulation ⇓	Aspirated/ unaspirated	Plosive		Nasal		Rolling		Fricatives		Retroflex		Lateral	
		Voiced	Voiceless	Voiced	Voiceless	Voiced	Voiceless	Voiced	Voiceless	Voiced	Voiceless	Voiced	Voiceless
Bilabial	Aspirated	bʱ											
	Unaspirated	b	p	m									
Labeo Dental	Aspirated								f				
	Unaspirated												
Dental	Aspirated	dʱ	tʰ										
	Unaspirated	d̪	t̪										
Alveolar	Aspirated							z					
	Unaspirated			n				zʱ				l	
Palatal	Aspirated		cʰ										
	Unaspirated		*c*						ʃ				
Palato alveolar	Aspirated	dʱ	tʰ							r			
	Unaspirated	d	t										
Velar	Aspirated	gʱ	kʰ										
	Unaspirated	g	k										
Glotal	Aspirated								h				
	Unaspirated												

Table 2: Inventory of Phoneme of Chandipuri Dialect

4.2 Categories

The consonant sounds of Chandipuri Dialect are categorised according to four characteristics and those are:

- Place of Articulation

- Manner of Articulation

- Voicing

- Aspiration

4.2.1 Place of Articulation

Place of articulation refers to the specific location in the vocal cord where a consonant is produced. It describes the point of contact or contraction that occurs when speech organs such as the tongue, lips, teeth, and palate come together or interact to produce different speech sounds. The speech organs are primarily involved in producing a particular sound. These speech organs modify the flow of air through the lungs. This process produces different sounds. The area where the airstream is obstructed is more significant for the correct production of sound. The vocal tract can be divided into different lines, each associated with a different place of articulation. Here are some common places of articulation:

- Bilabial: The two lips come together to produce sounds.

- Dental: The tip of the tongue contacts the upper teeth or the space between them.

- Labiodental: The lower lip contacts the upper teeth.

- Alveolar: The tip or blade of the tongue articulates with the alveolar ridge, which is a ridge extending behind the upper front teeth.

- Palatal: The middle or back part of the tongue contacts the hard palate.

- Velar: The back of the tongue contacts the soft part of the roof of the mouth, or velum.

- Glottal: The vocal cords or glottis are involved in production of sounds.

4.2.2 Manner of Articulation

Manner of articulation refers to how airflow is restricted or altered in the vocal tract to produce different speech sounds. It describes how the speech organs, such as the tongue, lips, and vocal cords, interact to produce specific sounds. The manner of articulation, together with the place of articulation, helps classify and categorise consonants. Before we start the analysis, here are some common manners of articulation.

- plosive: in this method, airflow is completely blocked or momentarily stopped and then released.
- Nasal: The nasal is formed by lowering the soft palate or velum to allow air to flow through the nasal cavity.
- Fricatives: While nasals and stop consonants involve complete blockage of the vocal tract, fricative sounds involve only partial obstruction of the vocal tract to force air through a narrow channel.
- Rolling: Rolling occurs when an active articulator hits or taps a passive articulator several times in succession.
- Lateral: Lateral consonants are when the tongue blocks the centre of the mouth to allow air to pass through the sides.

4.3 Analysis of Consonant Sounds

The pronunciation of consonant sounds of Chandipuri dialect can be analyse with groups of consonant sounds in the same area of articulation together
based on the four characteristics.

©Daffodil International University

4.3.1 Bilabial

The consonants /p/, /b/ , /bʱ/ and /m/ are bilabial Because they are produced using both lips.

Bilabial sounds are produced by bringing both lips together or upper and lower lips in contact.

The specific manner in which the lips interact determines the type of bilabial sound produced.

Here is a breakdown of the production process for these bilabial sounds:

/p/ : /p/ is voiceless bilabial plosive . To produce this consonant both lips are brought together

to form a complete closure, blocking airflow. Briefly shut off airflow from the lungs to create

air pressure behind the occlusion and suddenly release the closure, allowing the air to explode,

creating a short puff of sound. No voicing occurs during this sound. For example: /p/ /peɟ/

'Onion';

/b/ : The voiced bilabial plosive /b/ is similar to /p/, but with the addition of voicing. To produce

/b/ it brings both lips together for a complete closure, just like /p/.

Instead of stopping the airflow completely, it has to keep the lips closed and allow it to

continue. Simultaneously, the vocal cords vibrate, producing a voice. Release the closure,

thereby releasing the sound produced with vocal cord vibration. For example: /b/ /bun/

'Sister';

/bʱ/: The consonant /bʱ/ represents a voiced bilabial plosive with aspiration. The steps to

produce /bʱ/ are similar to /b/, but add a slight burst of air or aspiration. Aspiration is the release

of puffs of air after sound. For example: /bʱ/ /bʱoʈʈa/ 'Mashed';

/m/: The voiced bilabial nasal */m/* is produced by bringing both lips together to form a complete closure. Lower the soft palate (velum) and allow airflow through the nasal cavity, allowing air to escape through the nose. Vibrate the vocal cords simultaneously to produce voiced nasal sounds. Maintain lip closure and nasal airflow throughout the duration of the sound. For example: */m/ /mæti/* 'Soil';

4.3.2 Labeo dental

The sound */f/* is known as a voiceless labiodental fricative. It is produced using the lower lip and upper front teeth. Because it is produced by creating a narrow constriction in the vocal tract that allows airflow to pass through, causing friction or turbulent airflow the sound */f/* is fricative. For example: */f/ /fɔl/* 'Bean';

4.3.3 Dental

The sounds */t̪/, /t̪ʰ/, /d̪/,* and */d̪ʰ/* are dental sounds. They are produced by engaging the tongue and upper front teeth or the alveolar ridge (the ridge just behind the upper front teeth) in the articulation process. All of them are plosive. But when it is about voicing and aspiration, they are little different from each other.

/t̪/: This is a voiceless dental plosive and unaspirated. For example: */t̪/ /t̪uri/* 'Yours';

/t̪ʰ/: This is a voiceless aspirated dental plosive. The steps in the production of */t̪ʰ/* are similar to */t̪/,* with the addition of aspiration or a slight burst of air. Aspiration is the release of a puff of air followed by an explosive sound. For example: */t̪ʰ/ /t̪ʰaka/* 'Stay'

*/ḍ/***:** This is a voiced dental plosive.The vocal cords vibrate during this sound. For example: */ḍ/ /ḍæka/* 'Look';

*/ḍʰ/***:** This is a voiced dental plosive with aspirate. The steps to produce */ḍʰ/* are the same as */ḍ/*, but with the addition of an aspirate or a slight burst of air after the plosive. For example: */ḍʰ/ /ḍʰɔra/* 'Catch';

4.3.4 Alveolar

/n/ , /l/ ,/z/ ,/zʰ/ are alveolar as these sounds are produced by the connection of the tongue and the alveolar ridge, which is located just behind the upper front teeth.

*/n/***:** It is classified as an alveolar nasal. The place of articulation is alveolar, meaning the tip or blade of the tongue contacts the alveolar ridge while the soft palate is lowered, allowing air to pass through the nasal cavity. For example: */n/ /næmi/* 'Get down';

/l/ **:** */l/ is* an alveolar nasal sound which is produced when the tongue contact the back of the teeth in the upper part of the mouth. At the same time, it is caused by a lateral blockage at the midpoint and raising the tip of the tongue against the upper part of the mouth. For example: */l/ /lærɔkɔl/* 'Coconut';

Both the alveolar sound **/z/** and its aspirated part **/zʰ/** are voiced fricatives.

/z/ : The tip or blade of the tongue approaches or touches the alveolar ridge, creating a narrow passage for airflow while produces /z/ The vocal cords are computerised. Airflow passes

through the narrows between the tongue and the alveolar ridge, resulting in fricative sounds.

For example: */z/ /zalla/* 'Window'

/zʱ/: In addition to voicing, there is some delay or interruption of airflow after release of the fricative sound. This aspiration creates a wheezing or slight whispering effect. For example: */zʱ/ /zʱata/* 'broom';

4.3.5 Palatal

/c/, /cʰ/ are palatal consonants as they produce with the middle or back part of the tongue contacts the hard palate.

/c/: */c/* is a voiceless palatal plosive. This raises the middle part of the tongue to contact the hard palate, creating a closure that blocks airflow. The closure is then released, making an explosive sound. For example: */c/ /caka/* 'Wheel'

/cʰ/: */cʰ/* is a voiceless aspirated palatal plosive. It is produced similarly to /c/, with a complete closure between the middle part of the tongue and the hard palate. However, after release, there is a strong burst of air, resulting in release with aspiration or exhalation. For example : */cʰ/ /cʰaṭa/* 'Umbrella';

4.3.6 Palato Alveolar

/t/ , /tʰ/, /d/ , /dʱ/ , /r/ and /ʃ/ these sounds are palato-alveolar consonants because the tip of the tongue touches alveolar ridge while pronouncing these sounds .The alveolar ridge and primary tongue area are close to the hard palate.

/t/ and **/tʰ/:** /t/ is a voiceless palato-alveolar plosive, and /tʰ/ is a voiceless aspirated palato-alveolar plosive. These sounds are produced by creating a closure between the tip or blade of the tongue and the alveolar ridge. Airflow is blocked, and upon release, they produce explosive sounds. For example: /t/ /tæka/ 'Money'; /tʰ/ /tʰæka/ 'Obstacle';

/d/ and **/dʱ/:** /d/ is a voiced palato-alveolar plosive, and /dʱ/ is a voiced aspirated palato-alveolar plosive. They form by closing between the tip or blade of the tongue and the alveolar ridge similarly to /t/ and /tʰ/ . Airflow is blocked, and upon release, they produce explosive sounds. For example: /d/ /dim/ 'Egg'; /dʱ/ /dʱoa/ 'Clean'

/ʃ/: /ʃ/ is a voiceless palato-alveolar fricative. The tip of the tongue touches alveolar ridge while pronouncing /ʃ/ . For example: /ʃ/ /ʃeti/   'There'

/r/: /r/ is voiced, retroflex palato-alveolar. /r/ is produced by curling or raising the tip or blade of the tongue toward the alveolar ridge. In Chandipuri dialect the consonant /r/ appears in the middle or last part of a word. For example: /r/ /pɔra/   'Drop'

4.3.7 Velar

/k/ , /kʰ/, /g/ and /gʱ/ are velar sounds because while producing them The back of the tongue contacts the soft part of the roof of the mouth, or velum.

17
©Daffodil International University

/k/ and **/kʰ/**: */k/* is a voiceless velar plosive, and */kʰ/* is a voiceless aspirated velar plosive. These sounds are produced by creating a closure between the back of the oral cavity, the back of the tongue, and the velum (the soft part of the roof of the mouth). Airflow is blocked, and upon release, they produce explosive sounds. For example: */k/ /kata/* 'Cut'; */kʰ/ /kʰala/* 'Aunt';

/g/ and **/gʱ/**: */g/* is a voiced velar plosive, and /gʱ/ is a voiced aspirated velar plosive. They are produced similarly to */k/* and */kʰ/*, forming a closure between the back of the tongue and the velum. Airflow is blocked, and upon release, they produce explosive sounds. For example: */g/ /gacʰ/* 'Tree'; */gʱ/ /gʱata/* 'Road';

4.3.8 Glotal

/h/ is glottal sound and aspirated. To produce the sound /h/, the vocal cords are spread apart, creating an open space. When air is expelled from the lungs and passes through this open space, it results in the audible sound of /h/. For example: */h/ /hæmi/* 'I';

4.4 Vowel

There are seven vowels found in Chandipuri dialect after analysing the dialect. They are given below:

Place of Articulation

Front rounded   Central rounded   Back rounded

Hight [i]   [u]

High Mid[e]   [o]

Low mid [æ]   [ɔ]
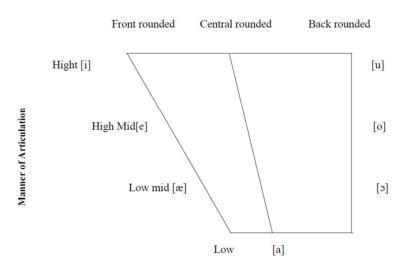
Low   [a]

Manner of Articulation

Figure1: Oral vowels of Chandipuri Dialect

Vowels of Chandipuri dialect can potentially be displayed using three units of extent. Depending on the parameters, these are given below:

4.4.1 Place of Tongue

We get front, central and back vowels according to the position of the tongue like:

Front vowels: [i], [æ], [e]

Central vowels: [a]

Back vowels: [ɔ], [o], [u]

4.4.2 Height of Tongue

According to the height of the tongue we get high, high-mid, low-mid and low vowels in this dialect such as:

Height of tongue	Place of tongue		
	Front	Central	Back
High	/i/		/u/
High-mid	/e/		/o/
Low-mid	/æ/		/ɔ/
Low		/a/	

Table 3: Vowels of Chandipuri dialect according to hight and place of tongue

4.4.3 Lip position

The position of the lips is considered by two dimensions: firstly, the rounded or unrounded position of the lips and secondly, the open position of the lips. Considering these two dimensions the vowels of Chandipuri dialect are:

	Unrounded		Rounded
Close	/i/		/u/
Half-close	/e/		/o/
Half-open	/æ/		/ɔ/
Open		/a/	

Table 4: Vowels of Chandipuri Dialect according to lips position

	/i/	/e/	/æ/	/a/	/ɔ/	/o/	/u/
High	+	-	-	-	-	-	+

High-mid	-	+	-	-	-	+	-
Low-mid	-	-	+	-	+	-	-
Low	-	-	-	+	-	-	-
Front	+	+	+	-	-	-	-
Back	-	-	-	-	+	+	+
Central	-	-	-	+	-	-	-
Rounded	-	-	-	-	+	+	+
Unrounded	+	+	+	-	-	-	-
Close	+	-	-	-	-	-	+
Half-close	-	+	-	-	-	+	-
Half-open	-	-	+	-	+	-	-
Open		-	-	+	-	-	-

Table 5: The oral vowel of Chandipuri dialect according to feature matrix

4.5 Vowel Analysis

To clarify the characteristics of the vowels of Chandipuri dialect it is needed to analyse them

/i/ : This is a close front unrounded vowel. To produce this sound, the front of the tongue is raised towards the front of the mouth, while the lips are unrounded. It is a high and tense vowel.

/æ/: This is a close-open front unrounded vowel. To produce this sound, the tongue is positioned relatively low and in the front position, the mouth is more open than in other front vowels. Lips are spread, not rounded.

/e/: This is a close-mid front unrounded vowel. To produce this sound, the tongue is raised and moved back slightly relative to /i/, while the lips are not rounded. It is a mid-high vowel.

/a/: This is the open central unrounded vowel. To produce this sound, the tongue is positioned relatively low in the centre of the mouth and the mouth is open. Lips are rounded.

/ɔ/: This is the open-mid back rounded vowel. To produce this sound, the back of the tongue is raised toward the back of the mouth, and the lips are rounded. It is a mid-low vowel.

/o/: This is a close-mid back rounded vowel. To produce this sound, the back of the tongue is raised toward the back of the mouth, and the lips are rounded. It is a mid-high vowel.

/u/: This is the close back rounded vowel. To produce this sound, the back of the tongue is raised toward the back of the mouth, and the lips are rounded. It is a high and tense vowel.

Chapter Five: Conclusion

This study explored the phonological features of the Chandipuri dialect of Naogaon,Bangladesh, highlighted its unique features and provided valuable insights into the linguistic landscape of the region. Through a careful analysis of its vowel system, consonant inventory and suprasegmental aspects, it has been possible to identify and document distinct phonological patterns that distinguish the Chandipuri dialect from other dialects and standard languages. Our investigations have shown that the Chandipuri dialect exhibits significant phonological phenomena, including specific vowel qualities and consonant and prosodic features. The dialect's phonology includes a range of front, central and back vowels, each with its own distinct pronunciation characteristics. Additionally, the inventory of consonants exhibits variation in place and manner of pronunciation, which contributes to the phonetic richness of the dialect.

Furthermore, this analysis uncovered significant suprasegmental features such as tone, stress pattern and intonation form, which play an important role in denoting the meaning of lexical items in the Chandipuri dialect. These findings highlight the complex interplay between segmental and suprasegmental elements in the phonological structure of dialects. Understanding the phonological features of the Chandipuri dialect has implications for several areas of research, including language documentation, sociolinguistics, and dialectology. By documenting and analysing these distinctive features, we contribute to the preservation and appreciation of linguistic diversity, as well as facilitate further research and understanding of dialects.

In conclusion, this study advances our knowledge of the Chandipuri dialect by providing a comprehensive phonological analysis. By uncovering the complexities of its sound system and suprasegmental features, it could contribute to the broader field of linguistics and promote a deeper understanding of the linguistic diversity that characterises the world.

Appendix

Initial, Medial and Final Contrasts

Set 1:

/kʰ/	/kʰamo/	'will eat'
/z/	/zamo/	'will go'
/l/	/limo/	'will take'
/ḍ/	/ḍimo/	'will give'

Set 2:

/l/	/læo̰/	'take'
/kʰ/	/kʰao̰/	'eat'
/z/	/zao̰/	'go'
/ḍ/	/ḍæo̰/	'give'
/p/	/pao̰/	'leg'

Set3:

/kʰ/	/kʰæt̪t̪e/	'eating'
/l/	/lit̪t̪e/	'taking'
/z/	/zæt̪t̪e/	'going'
/k/	/korit̪t̪e/	'doing'
/ḍ/ /	ḍit̪t̪e/	'giving'

Set:4

/p/	/pælla/	'pot'
/k/	/kalla/	'head'
/g/	/golla/	'sweet'
/b/	/bolla/	'wasp'

Set5:

/k/	/kɔt̪a/	'speak'
/m/	/mat̪a/	'head'
/p/	/pat̪a/	'leap'
/h/	/hat̪a/	'spoon'

Set6:

/ɟ/	/mæɟa/	'floor'
/l/	/mæla/	'fair'
/ʃ/	/mænuʃ/	'human'

Set7:

/ʈ/	/ʈɔle/	'under'
/d/	/dole/	'mash'
/z/	/zɔle/	'irritation'

Set8:

/ʈ/	/paʈa/	'leap'
/k/	/paka/	'ripe'
/ʈ/	/pãʈar/	'farming field'

Set9:

/ʈ/	/æʈ/	'night'
/l/	/æ̃ælu/	'potato'
/n/	/ænu/	'have come'
/t/	/æta/	'ort'
/ʃ/	/æʃa/	'after coming'

Set10:

/ɔ/	/ɔti/	'here'
/ʃ/	/ʃeti/	'there'
/z/	/zeti/	'where'

Set11:

/h/	/hæmi/	'I'
/n/	/næmi/	'get down'
/ɖ/	/ɖæmi/	'expensive'

Set12:

/ʈ/	/bæʈ/	'in house'
/ʈ/	/bæʈ/	'rattan'
/l/	/bæluʃ/	'pillow'

Set13:

/bʰ/	/bʰæn/	'van'
/f/	/fæn/	'fan'
/b/	/bæn/	'probably'

Set14:

/gʰ/	/gʰata/	'road'
/p/	/pata/	'muller'
/k/	/kata/	'cut'

Set15:

/cʰ/	/macʰ/	'fish'
/l/	/mala/	'necklace'
/ʈ/	/maʈa/	'heat'

Set16:

/zʱ/	/zʱal/	'spicy'
/dʱ/	/dʱæl/	'brickbat'
/d/	/dal/	'branch'

Set17:

/t/	/tæka/	'money'
/tʰ/	/tʰæka/	'obstacle'
/b/	/bæka/	'curved'

Set18:

/ɖʱ/	/ɖʱɔra/	'catch'
/p/	/pɔra/	'study'
/k/	/kɔra/	'doing'

Set19:

/ʈʰ/	/ʈʰaka/	'stay'
/p/	/paka/	'ripe'
/m/	/maka/	'mould'
/c/	/caka/	'wheel'

Set20:

/r/	/gæri/	'transport'
/n/	/gænu/	'went'
/cʰ/	/gæcʰe/	'has gone'

Set 21:

/cʰ/	/macʰ/	'fish'
/l/	/mal/	'goods'

Set22:

/ʈ/	/æʈ/	'night'
/k/	/æk/	'one'

Set23:

/n/	/an/	'bring'
/m/	/am/	'mango'

Set24:

/r/	/kʰær/	'straw'
/l/	/kʰæl/	'play'
/p/	/kʰæp/	'round'

References

Mia, S. (2020). Describing Phoneme Inventory of Santali Language: A Linguistic Approach. *ResearchGate*. Retrieved from: https://www.researchgate.net/publication/348631028_Describing_Phoneme_Inventory_of_Santali_Language_A_Linguistic_Approach

Manner of Articulation. (n.d.). StudySmarter UK. Retrieved from: https://www.studysmarter.co.uk/explanations/english/phonetics/manner-of-articulation/

NAOGAON. (n.d.). Retrieved from: http://greenbdinfo.blogspot.com/2008/06/naogaon.html

Phonological Analysis of Chatkhil Dialect in Noakhali District, Bangladesh. (n.d.). *Md. Mostafa Rashel*.

Phonology. (n.d.). StudySmarter UK. Retrieved from: https://www.studysmarter.co.uk/explanations/english/phonology/

Place of Articulation | FREE Pronunciation E-Course | The Mimic Method. (2021, January 28). The Mimic Method. Retrieved from: https://www.mimicmethod.com/ft101/place-of-articulation/

Wikipedia contributors. (2023). Naogaon District. Retrieved from: Wikipedia. https://en.wikipedia.org/wiki/Naogaon_District

নওগাঁ জেলা. (n.d.-b). Retrieved from: https://www.naogaon.gov.bd/

©Daffodil International University