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Phonological Adaptations of Bangla Words in Chakma

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Abstract

This paper examines the phonological changes in the words from Bangla to Chakma. Chakma is considered to be heavily influenced by Bangla. The origin and advent of this language are controversial with no concrete proof. Scholars over time have categorised them as a dialect or a sub-dialect of Bangla. This paper is not further research as to whether or not this categorisation holds to the point but rather it has tried to capture the phonological changes taking place between the root words of the two languages. The processes involved in the phonological changes include: voicing, gemination, monothongization, fricativization, assimilation, cluster simplification, vowel harmony, de-fricativization, allophonic changes, and free variation, metathesis, and de-aspiration. This paper's analysis of sound changes sheds light on the intricate linguistic connection between Chakma and Bangla, revealing the substantial influence of Bangla on Chakma's vocabulary and phonology. The study's findings contribute to the broader discourse on language contact, linguistic identity, and the classification of Chakma within the Indo-Aryan language family in the conclusory note. Additionally, the research proposes potential avenues for future investigation into the linguistic dynamics of South Asia.

Keywords: Chakma Language, Bengali Influence, Phonological Processes, Language Contact, Linguistic Borrowing, Indo-Aryan Languages, Language Evolution, Multilingualism.

1. Introduction

The advent and origin of Chakma have no recorded history of their own. According to the 2011 Census of India, there are 2,28,281 Chakma speakers dwelling in India out of which 175 are found in West Bengal, 47,073 in Arunachal Pradesh, 92,850 in Mizoram, 84,269 in Tripura, 3,166 in Assam, 159 in Meghalaya, and 103 in NCT of Delhi. Besides India, Chakma speakers

are also found in the Chittagong hill tract of Bangladesh. The Census of India categorises Chakma as a mother tongue under the Bengali language. Grierson (1903) has classified Chakma as a sub-dialect of the Bengali language which is seconded by Chatterjee (1967) in his letter to S.P. Talukdar (1994) which he has in his book.

There is a scholarly belief that the Chakmas originally belonged to the Sakya Dynasty and in the urge to spread Buddhism, they migrated to the Arakans. There is a certainty of their long history of migration which makes it difficult to achieve the original history except for the existing folklore and oral traditions which give a sketchy idea without concrete shreds of evidence. All these years of migration have made immense impacts on Chakma as a language. From the Arakans, they next moved to the Chittagong hill tract and from Chittagong to Rangamati. It was then they were believed to be introduced to the Bengali language. They started their formal education and daily survival exposure in Bengali.

All these years of migration and the direct impact of the Bengali language influenced Chakma as a language. The semantics and lexicon of the language are influenced largely by Bengali. The geographical area and contact with the Bengali language profoundly impact the language so much that linguists consider them as a dialect or variant of the Bengali language. There are considerable sound changes from Bengali to Chakma because Bangla has influenced the Chakma words. The borrowed words have undergone considerable phonemic changes through the processes of voicing, gemination, fricativization, assimilation, etc. A detailed analysis of those sound changes has been provided in this paper.

The impact of Bengali on Chakma can be observed in the phonological transformations that occur in Chakma words borrowed from Bengali. These transformations encompass processes such as voicing, gemination, fricativization, assimilation, vowel harmony, de-fricativization, allophonic changes, free variation, metathesis, and de-aspiration. This study aims to provide a comprehensive examination of these phonological changes, contributing to a better understanding of the linguistic relationship between Chakma and Bengali. Although this study does not seek to settle the debate over whether Chakma is a dialect of Bengali or a distinct language, it does offer valuable insights into the phonological processes that occur in the adaptation of Bengali words into Chakma.

The influence of Bengali on Chakma is particularly pronounced in the realm of vocabulary and phonology. Chakma has borrowed extensively from Bengali, not only in terms of lexical items but also in the phonological processes that govern the language. This influence is visible in various phonological changes such as voicing, gemination, fricativization, assimilation, vowel harmony, de-fricativization, allophonic changes, free variation, metathesis, and de-aspiration, which occur when Bengali words are adopted into Chakma. The borrowed words often undergo systematic changes to fit the phonological structure of Chakma, resulting in a unique set of adaptations that distinguish the Chakma versions of these words from their Bengali originals.

The impact of Bengali on the colloquial speech of Chakma speakers is substantial. The everyday speech of Chakma speakers, known as colloquial Chakma, is heavily influenced by Bengali, especially in regions where the two languages are spoken together. This influence extends to not just vocabulary but also pronunciation and syntactic structures. As a result, many Chakma speakers have adopted Bengali colloquial terms into their daily speech, making it more challenging to answer the debate or whether or not Chakma is a mother tongue of Bangla. The aim of this study is to provide a valuable addition to the ongoing conversation about the classification of Chakma and to shed light on the broader language contact issues in South Asia by critically examining these phonological processes.

The relationship between Chakma and Bengali is complex and intricate, highlighting the intricacies of language evolution in a multilingual area. This raises significant questions about linguistic identity, the manner in which languages change, and the ways in which they influence each other as a result of sustained contact. This study's results will deepen our comprehension of the Chakma language and shed light on the broader phenomenon of language change in contact situations, especially in Indo-Aryan languages.

1.2. Literature Review

For years, scholars have been intrigued by the linguistic link between Chakma and Bangla, debating whether Chakma is a dialect or sub-dialect of Bangla. This debate dates back to early studies, notably Grierson's Linguistic Survey of India (1903), which classified Chakma as a Bengali sub-dialect. Chatterjee (1967) supported Grierson's view in his correspondence with S.P. Talukdar (1994). Talukdar also explored this issue in his research on the Chakma language.

The linguistic identity of Chakma is more intricate, particularly considering the long-term

interaction between Chakma and Bangla. Scholars such as Bhattacharyya (2004) have examined

Chakma from sociolinguistic and phonological angles, emphasising how migration and historical

contact with Bengali speakers have influenced the Chakma language. The extensive borrowing

from Bangla has profoundly affected Chakma's lexicon and sound system, prompting some

linguists to contend that Chakma should be classified as a separate language within the Indo-

Aryan family, rather than a dialect.

Studies in contact linguistics, exemplified by Thomason and Kaufman's (1988) investigation into

the evolution and mutual influence of languages in contact scenarios, offer a theoretical

framework for comprehending the alterations observed in Chakma as a result of its interaction

with Bengali. The work of Thomason and Kaufman underscores the importance of language

contact in driving phonological, lexical, and syntactic modifications, which is pertinent to

Chakma's extensive adoption of elements from Bangla.

Earlier research in the field, including Hock and Joseph's (2009) examination of historical and

comparative linguistics, provides valuable perspectives on the phonological alterations that

transpire when languages interact. Similarly, Labov's (1994) theories on linguistic change offer

essential understanding of the internal elements that can shape the adaptation of borrowed words,

a phenomenon observed in the relationship between Chakma and Bangla languages.

Additionally, Mishra's (2009) study on the phonological aspects of loanwords in Khasi offers a

comparable instance of phonological borrowing within the South Asian linguistic landscape. His

observations regarding how Khasi has incorporated words from surrounding languages mirror

the phonological shifts observed in Chakma, particularly with respect to fricativization and

vowel harmony processes.

Complementing these investigations, Ganguly and Talukdar (1996) offer a linguistic analysis of

Chakma, emphasising its distinctive characteristics within the Indo-Aryan language group. Their

research enhances the broader discussion on language interaction, shedding light on the

sociolinguistic consequences of Chakma's contact with Bangla.

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The research conducted by Masica (1991) on Indo-Aryan languages provides crucial background for comprehending the broader categorisation of Chakma. Although Masica's classification system is based on structural characteristics, this study's emphasis on phonological adaptation introduces fresh evidence that may challenge the current classification of Chakma. This new perspective suggests that Chakma should be considered a separate linguistic entity rather than merely a sub-dialect of Bangla.

This study expands upon previous research by providing an in-depth examination of phonological mechanisms, including voicing, gemination, fricativization, and vowel harmony, which have influenced the incorporation of Bangla words into Chakma. The research's focus on phonological transformations complements existing work in contact linguistics, such as Fishman's (2000) investigation of language shift, which is particularly pertinent to comprehending the sociolinguistic aspects of Chakma's lexical borrowing from Bangla.

The scholarly discourse on the phonological adaptation of Bangla words in Chakma encompasses various key themes, including linguistic borrowing, language contact, and the ongoing debate regarding dialect versus language classification. This study contributes to the existing body of knowledge by offering a phonological examination of Bangla word integration into Chakma. Additionally, it paves the way for future investigations, particularly in areas such as syntactic borrowing, the effects of language shift, and the broader categorisation of Chakma within the Indo-Aryan language family. Although substantial research has been conducted on the Chakma language, gaps in the literature persist, especially concerning its status as a dialect or distinct language. This investigation suggests that sociolinguistic factors, including urbanisation and bilingualism, play a pivotal role in Chakma's evolution, warranting further exploration of the dynamics.

1.3. Research Methodology

This research employs a descriptive and comparative methodology to investigate the phonological changes that have occurred in Chakma due to its interaction with Bengali. The study is underpinned by the theoretical framework of contact linguistics, which explores the ways in which languages impact each other when they have sustained contact. This approach is particularly useful for examining the relationship between Chakma and Bengali, given the historical and sociolinguistic context in which these languages have intermingled.

The main source of data for this research was gathered from native Chakma speakers who reside in different regions of India, particularly in Arunachal Pradesh, Mizoram, Tripura, and West Bengal, where a substantial number of Chakma speakers reside. These individuals gave us a collection of Chakma words that have been borrowed from Bengali. This corpus was then examined to detect and classify the phonological changes that have taken place during the shift from Bengali to Chakma. The study concentrated on recognizing sound change patterns, such as voicing, gemination, fricativization, assimilation, and others, as previously introduced.

In order to guarantee the accuracy of the data, various sources were consulted, such as historical linguistic surveys like Grierson's Linguistic Survey of India (1903) and recent studies on the Chakma language conducted by scholars like Bhattacharyya (2004) and Talukdar (1994). Additionally, the study utilized secondary data from published dictionaries, such as Chakma's (1986) *Chakma Bhasar Abhidan*, to verify the phonological changes identified in the primary

data.

The comparative analysis involved a detailed examination of the phonological processes in both Chakma and Bengali, using standard linguistic methods, such as phonemic analysis and morphophonemic analysis. This approach enabled a systematic comparison of the two languages and the identification of specific phonological rules governing the adaptation of Bengali words into Chakma. Furthermore, the study considered the sociolinguistic factors that may have influenced these phonological changes, such as language contact, bilingualism, and language shift, drawing on theoretical insights from scholars like Thomason and Kaufman (1988) on the impact of language contact on phonology.

This study employs descriptive, comparative, and theoretical approaches to enrich our comprehension of the phonological adaptation processes in Chakma, while also illuminating the broader linguistic dynamics at play in the relationship between Chakma and Bengali. The outcomes of this research have important implications for the categorisation of Chakma within the Indo-Aryan language family and contribute to the broader field of contact linguistics in the conclusion section.

2. Phonological Processes

2.1 Voicing

Voiceless consonants between two vowels get voiced.

kutum → hudum 'guest' kukur → hugur 'dog'

upur → ugur 'lie back' niti → nidi 'moral'

2.2. Gemination

/t/ between two vowels gets geminated.

at \rightarrow atto 'eight' kata \rightarrow kutta 'cut'

kathal→Kuttal 'jack fruit'

2.3. Fricativisation

2.3.1. The affricate /tʃ/ in the initial position in Bangla gets fricativised into /s/ in Chakma.

1. $t \int it \rightarrow sit$ 'heart'

2. tſulo →sulwo 'Oven'

3. $t \int ok^h \rightarrow sok$ 'eyes'

4. $t \int and \rightarrow san$ 'moon'

2.3.2. /dʒ/ in Bangla bedcomes /z/ in Chakma

1. dʒal → zal net'

2. dʒagano → zagana 'to make someone wake up'

3. dʒogot →zogot 'world'

4. dʒɔma→zɔma 'submit'

5. modʒa→moza 'fun'

6. badʒna → bazna 'instrument'

7. badʒi → bazi 'bet'

8.led₃→lez 'tail'

9. $ted_3 \rightarrow tez$, fast'

10. bad $3 \rightarrow$ baz ,thunder'

2.4. Affricativisaion

The fricative /s/ in the word-final position in Bangla changes into affricate /tʃ/ in Chakma

1. manus → manut ſ 'human'

2. akas →akat∫ 'sky'

3. unis →unot∫ 'nineteen'

2.5. Assimilation

In bisyllabic words, one vowel often tends to affect the other in Chakma.

1. kalo → hala 'black'

2. adrok →odrok 'ginger'

3. kɔkʰon →hɔkkɔn 'when'

4. obotar → obothar 'incarnation'

2.6. Vowel Harmony

Vowel harmony is the type of assimilation where one vowel shares certain features with the contrastive vowel in the same segment or word.

2.6.1. The close-mid vowel /e/ in Bengali becomes almost open /æ/ in Chakma and the close-mid /o/becomes mid-open /ɔ/ in Chakma, due to the influence of the open /a/ vowel in Chakma.

1. debota →dæbota 'God'

2. denadar →dænadar 'debtor'

3. dergun →dærgun 'two and a half quantities'

2.6.2. The back vowel often tends to affect the front vowel to become the back vowel in monosyllabic words.

1. koi →kou 'where'

2. unis →unot∫ 'nineteen'

2.7. De-fricativisation

The glottal plosive /h/ in Bengali in the word-initial and medial position, becomes glottal stop/?/ in Chakma.

hiŋsa→ʔiŋja 'jealousy'
har →ʔar 'necklace'
hat →ʔat 'hand'

- 5. daho →da?o 'burn'
- 6. ha →?a 'wide open'

2.8. Allophonic Changes and Free Variation

- 2.8.1. /k/ has two allophones velar fricative[x] and glottal fricative[h] in Chakma. The /k/ in Bangla changes to /x/ intervocally and initially.
 - 1. kɔpal →xɔbal 'forehead'
 - 2. klanto →xlanto 'tired'
 - 3. akar →axuk 'shape'
 - 4. bekar →bexar 'useless'
 - 5. elaka →elaxa 'area'
 - 6. ækattor →æxattor 'seventy one'
 - 7. dorkar →dorxari 'important'
- 2.8.2. In some cases, /k/ or the aspirated $/k^h/$ changes to [h] in Chakma initially and intervocally.
 - 1. kan →han 'ear'
 - 2. k^hun →hun 'blood'
 - 3. konuy →henuli 'elbow'
 - 4. makhon → mahon 'butter'
- 2.8.3. The allophones [h] and [x] are often in free variation with each other in Chakma.
 - 1. kintu→xintu/ hintu 'but'
 - 2. kal →xal/heile 'tomorrow'
 - 3. khali→xali/ hali 'empty'
 - 4. kil →xil/hil 'door lock'
- 2.8.4. In Chakma, the bilabial fricative $[\phi]$ is used as the allophone of p in many cases and replaces p in Bangla words intervocalic and initially.
 - 1. nepali→neφali 'Nepali'
 - 2. pensil→ pensil 'Pencil'
 - 3. pata → opata 'leaf'
 - 4. $patf \rightarrow \phi atf$ 'five'

2.9. Metathesis

Though a rare phenomenon, metathesis is found in some word and sentential levels.

1. konuy→hunoy 'elbow'

2. jabe → jeba 'will go'

2.10. De-aspiration

Aspiration is not found in Chakma except in the case of the dental aspirated stop [th] which is an allophone of /t/ in Chakma. All other aspirated sounds in Bangla get de-aspirated in Chakma.

khun→hun 'blood'
dudh→dut 'milk'
t∫okh→sok 'eye'
khoti→xoti 'loss'
dokhin→dogin 'south'
phuto→фudo 'hole'

The /t/ in Bangla changes to dental aspirated stop [th] word initially and intervocally in Chakma.

1. $tap \rightarrow t^h ap$ 'heat'

2. əbotar→əbətʰar 'incarnation'

3. dʒæmiti→dʒæmithi 'geometry'

3. Socio-Linguistic Perspective

The influence of Bengali on Chakma is particularly pronounced in the realm of vocabulary and phonology. Chakma has borrowed extensively from Bengali in terms of lexical items and the phonological processes that govern the language. This influence is visible in various phonological changes such as voicing, gemination, fricativization, assimilation, vowel harmony, de-fricativization, allophonic changes, free variation, metathesis, and de-aspiration, which occur when Bengali words are adopted into Chakma. The borrowed words often undergo systematic changes to fit the phonological structure of Chakma, resulting in a unique set of adaptations that distinguish the Chakma versions of these words from their Bengali originals.

The impact of Bengali on the colloquial speech of Chakma speakers is substantial. The everyday

speech of Chakma speakers, known as colloquial Chakma, is heavily influenced by Bengali,

especially in regions where the two languages are spoken together. This influence extends to not

just vocabulary but also phonemic and syntactic structures. As a result, many Chakma speakers

have adopted Bengali colloquial terms into their daily speech, making it more challenging to

answer the debate of whether or not Chakma is a dialect of Bangla.

The relationship between Chakma and Bengali is complex and intricate, highlighting the

intricacies of language evolution in a multilingual area. This raises significant questions about

linguistic identity, the manner in which languages change, and the ways in which they influence

each other as a result of sustained contact. This study's results have not only deepened our

comprehension of the Chakma language but also shed light on the broader phenomenon of

language change in contact situations, especially in the context of Indo-Aryan languages.

The findings demonstrate a substantial level of linguistic adjustment, highlighting the profound

impact that Bengali has had on Chakma throughout the ages. This impact is not only noticeable

in formal settings but also in the informal conversation of Chakma speakers, where Bengali

lexical items and phonological patterns are frequently observed.

The research highlights the intricate bond between Chakma and Bengali, which has been

influenced by historical movements, lasting interaction, and linguistic factors. Despite Chakma's

preserved distinct linguistic identity, its pronounced borrowing from Bengali has resulted in

significant changes in its sound system. While some experts have categorised Chakma as a

Bengali dialect, the phonological evidence featured in this paper indicates that Chakma possesses

special features that warrant acknowledgment as a separate language.

This study sheds light on the broader phenomenon of language change in contact situations,

where languages adopt and adapt features from one another, giving rise to the emergence of fresh

linguistic forms. The case of Chakma and Bengali offers a valuable illustration of how languages

can impact one another over time, leading to substantial phonological modifications.

However, this study does not provide a comprehensive account, and there are several areas that

require additional research. Future studies could delve into other aspects of the Chakma-Bengali

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relationship, such as syntactic changes, lexical borrowing beyond the phonological scope, and the impact of Bengali on other minority languages in the region.

Conclusion

The elaborate description of Bangla to Chakma sound changes has provided some marginal and some effective sound changes. There remain words in the lexicon of the two languages that are completely different with the same meaning which doesn't fall under the scope of this paper. The variation might be due to the contact and influence of each other. The above discussion and examples are insufficient to decide whether Chakma is a dialect of Bangla or a language of its own. This is a mere observation of sound changes between the two languages' common root words. Further scopes and areas can be looked into for future research on this aspect. The aim of this study is to provide a valuable addition to the ongoing conversation about the classification of Chakma and to shed light on the broader language contact issues in South Asia by critically examining these phonological processes. Moreover, the sociolinguistic dynamics of language shift among Chakma speakers, particularly in urban and bilingual contexts, merit further investigation. This study has investigated the phonological transformations that take place when Bengali words are adopted into Chakma, providing an in-depth examination of processes such as voicing, gemination, fricativization, assimilation, vowel harmony, de-fricativization, allophonic changes, free variation, metathesis, and de-aspiration.

In summary, the ongoing discussion about whether Chakma is a dialect of Bengali or a separate language remains undecided. Nevertheless, this study enhances our comprehension of the phonological processes that occur in language contact scenarios. It lays the groundwork for future research and unveils the complex interplay between languages in a multilingual environment. By examining phonological modifications, we acquire a greater understanding of the diverse linguistic landscape that defines the Chakma language and its associations with Bengali.

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