

**THE EFFECTS OF DIACHRONIC SOUND CHANGE
ON THE SYNCHRONIC GRAMMAR:
THE CASE STUDY OF SYLHETI**

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**DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES
INDIAN INSTITUTE OF TECHNOLOGY DELHI**

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by

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DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

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Certificate

This is to certify that the thesis **The Effects of Diachronic Sound Change on the Synchronic Grammar: The Case Study of Sylheti** submitted by **Ankita Prasad** (entry no. 2017HUZ8133) to the Department of Humanities and Social Sciences, Indian Institute of Technology, for the award of **Doctor of Philosophy** is a record of bona fide work carried out by her under my supervision. In my opinion, the thesis has reached the standards of fulfilling the requirements for submission relating to the degree. The contents of the thesis have not been submitted in part or full, to any other university or institute for the award of any other degree or diploma.

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All errors are my own.

Ankita Prasad

Abstract

This thesis examines the synchronic restructuring of a language’s grammar in response to diachronic sound change. The sound changes of deaspiration and spirantization in Sylheti resulted in a drastic reduction of lexical contrasts. I argue that a synchronic “crazy rule” of velar fortition arose in Sylheti in response to this change. The effect of diachronic change on the Sylheti grammar is indirect—it is not like the crazy or suspicious rules of Bach & Harms (1972) and Scheer (2015), where successive sound changes obscure the effect of a rule, leading to opaque surface patterns. Instead, the rule appears to be a case of contrast preservation of a marked category in a marked environment (Prasad, 2021). The Optimality Theoretic analysis shows that parametrized faithfulness and markedness constraints on place of articulation (PoA) and voicing are responsible for the observed distribution of Sylheti obstruents. Markedness constraints are minimally satisfied through constraint conjunction (Smolensky, 1995) to prevent the neutralization of lexical contrasts. I also present a Government Phonology analysis of the alternation using licencing conditions. The thesis also compares the theoretical account of Sylheti phonology with the analysis of data collected in Lakhipur, Assam, through three structured data elicitation tasks. The data showed that the velar fortition rule is a categorical phonological rule, being exceptionless. It also showed an interaction with phonetic processes like voicing assimilation (*ek d̥in* [ɛɣd̥in] ‘one day’) and initial aspiration (*kisu* [k^hisu] ‘something’). The orthographic representation of aspiration is found to have a marginal effect on the velar obstruent’s phonetic realization.

सार

यह थीसिस डायक्रोनिक ध्वनि परिवर्तन के परिणामस्वरूप भाषा के व्याकरण के समकालिक पुनर्गठन की जांच करती है। सिलहटी में डीएस्पिरेशन और स्पर्रेटाइजेशन के ध्वनि परिवर्तनों के परिणामस्वरूप शाब्दिक विरोधाभासों में भारी कमी आई है। मेरा तर्क है कि इस परिवर्तन के परिणामस्वरूप सिलहटी में वेलार फोर्टिशन का एक समकालिक 'अटपटा नियम' उत्पन्न हुआ। सिलहटी व्याकरण पर ऐतिहासिक परिवर्तन का प्रभाव अप्रत्यक्ष है - यह बाख एंड हार्म्स (1972) और शीर (2015) के अटपटे या संदिग्ध नियमों की तरह नहीं है, जहां क्रमिक ध्वनि परिवर्तन एक नियम के प्रभाव को अस्पष्ट कर देते हैं, जिससे अपारदर्शी सतही पैटर्न बन जाते हैं। बल्कि, यह नियम एक चिह्नित वातावरण में एक चिह्नित श्रेणी के कंट्रास्ट संरक्षण का मामला प्रतीत होता है (प्रसाद 2020)। ऑप्टिमैलिटी थ्योरी (OT) के अंतर्गत विश्लेषण से पता चलता है कि आर्टिक्यूलेशन के स्थान (पीओए) और वोइसिंग पर पैरामीट्रिज्ड फेथफुलनेस और चिह्नितता की बाधाएं सिलहटी में देखे गए वितरण के लिए जिम्मेदार हैं। शाब्दिक विरोधाभासों के तटस्थता को रोकने के लिए बाधा संयोजन (स्मोलेंस्की, 1995) के माध्यम से चिह्नित बाधाओं को न्यूनतम रूप से संतुष्ट किया जाता है। मैं लाइसेंसिंग बाधाओं का उपयोग करते हुए विकल्प का गवर्नमेंट फोनोलॉजी के अंतर्गत विश्लेषण भी प्रस्तुत करती हूं। यह थीसिस तीन विभिन्न संरचित डेटा एलिसिटेशन कार्यों के माध्यम से असम के लखीपुर में एकत्र किए गए डेटा के विश्लेषण के साथ सिलहटी ध्वनिविज्ञान के सैद्धांतिक विवरण की तुलना भी करती है। डेटा से पता चला कि वेलर फोर्टिशन नियम अपवाद रहित होने के कारण एक श्रेणीबद्ध ध्वनिविज्ञान नियम है। यह भी ज्ञात होता है कि इस नियम का अन्य ध्वन्यात्मक प्रक्रियाओं जैसे वोइसिंग एसिमिलेशन ([ɛy#dɪn] 'एक दिन') और शुरुआती aspiration ([kʰisu] 'कुछ';) के साथ इंटरैक्शन होता है। डेटा से यह भी पता चला है कि ऑर्थोग्राफिक प्रतिनिधित्व का वेलर ऑब्स्ट्रुएंट के ध्वन्यात्मक अहसास पर बहुत सीमित प्रभाव पड़ा है।

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List of Abbreviations

Language Family and Language Variety¹

PIE	Proto Indo-European
IE	Indo-European
PIIr	Proto Indo-Iranian
PIA	Proto Indo-Aryan
PGer	Proto Germanic
PGr	Proto Greek
Hitt.	Hittite
OP	Old Persian
IA	Indo-Aryan
TB	Tibeto-Burman
AA	Austro-Asiatic
OIA	Old Indo-Aryan
MIA	Middle Indo-Aryan
NIA	New Indo-Aryan
EIA	Eastern Indo-Aryan
CIA	Central Indo-Aryan
WIA	Western Indo-Aryan
OB	Old Bangla
EB	Eastern Bangla
ESB	Eastern Standard Bangla
SCB	Standard Colloquial Bangla
NB	North Bengali
KRNB	Kamta Rajbanshi Northern Deshi Bangla
RI	Rangeli

¹ Note on spellings: Bengali, Assamese, and Oriya are the widely used spellings adopted from colonial writings on these languages. Current language users prefer modern spellings like Bangla, Ahomiya, Odia, that are more accurate representations of the language names as pronounced by native speakers. The two names can be used interchangeably. Generally, language names are referred to by the preferred endonym. However, while referring to them as groupings of varieties, such as the “Bengali languages” or “North Bengali” I use the exonyms Bengali and Assamese.

Ks	Kishanganj
Sh	Shalkumar
Th	Thakurgaon
Rp	Rangpur
Bh	Bhatibari
Bn	Bongaigoan
TrB	Tripura Bengali
Noa.	Noakhali
As.	Assamese (Asamiya/ Ahomiya/ Axomiya)
Skt.	Sanskrit
Pkt.	Prakrit
Syl.	Sylheti (Sylheti Bangla)

Phonological and Theoretical Terms

C	Consonant
C ₁ C ₁	Geminate
C ₁ C ₂	Heterorganic consonant sequence
CG	Consonant Gradation
CM	Consonant Mutation
D	Voiced stop
DH	Voiced aspirated stop
F	Fricative
GP	Government Phonology
HV	High vowel
L	Liquid
N	Nasal
NC	Homorganic nasal-stop cluster
NHV	Non-high vowel
Obs	Obstruent
OCP	Obligatory Contour Principle
OT	Optimality Theory
PF	Phonetic Form
PhC	Phonological Component
PoA	Place of Articulation

SFP	Substance Free Phonology
son.	sonorant
Str	Strong
T	Voiceless stop
TH	Voiceless aspirated stop
UG	Universal Grammar
UR	Underlying Representation
V	Vowel
Wk	Weak

Gloss (following Leipzig Rules)

1	first person
2	second person
3	third person
CL	clitic
F	feminine
FUT	future
GEN	genitive
HAB	habitual
IMP	imperative
INST	instrumental
IPFV	imperfective
LOC	locative
M	masculine
NOM	nominative
PL	plural
PERF	perfect
PRS	present
PROG	progressive
PST	past
SG	singular
Q	question particle

Abbreviated Citations

B&E Bybee & Easterday (2019)

SPE Sound Patterns of English (Chomsky & Halle, SPE, 1968)

P&S Prince & Smolensky (Prince & Smolensky, 1993/2002)