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

ANKITA PRASAD

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES
INDIAN INSTITUTE OF TECHNOLOGY DELHI

JULY 2024

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

by

ANKITA PRASAD

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

Submitted

in fulfilment of the requirements of the degree of

Doctor of Philosophy

to the

INDIAN INSTITUTE OF TECHNOLOGY DELHI

JULY 2024

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.

Prof. Paroma Sanyal
Associate Professor
Department of Humanities and Social Sciences
Indian Institute of Technology-Delhi
New Delhi, India

Date:

Acknowledgements

The people of Fulertol village in Lakhipur, as well as Silchar, Assam have my wholehearted thanks for welcoming me into their midst and sharing their knowledge and time with me. This thesis would not have been possible without their collaboration. Basana Das was always willing to answer my questions about data and share her expertise, both linguistic and logistical, in organizing my field visit to Lakhipur. Jhinuk and Jhilik, thank you for the delightful excursions during my visits. I would also like to thank Samita aunty for her hospitality and guidance about all things Sylheti during my first field visit to Silchar. I hope I have done justice to the time they spent with me.

I thank my supervisor Dr Paroma Sanyal for her help and guidance throughout the long and winding road of my PhD journey. She was always willing to discuss theoretical problems, interesting data, OT formalisms, and writing advice in our endless discussions. Her seminars and reading groups have been invaluable resources in my training. I must also acknowledge the helpful advice and guidance I received from my committee members, Dr Samar Husain, Dr Somdev Kar, and Prof Ravinder Kaur during IIT seminars and otherwise. The staff at the IIT HuSS office; Neelam ji, Pankaj, Mukesh, and others have my eternal gratitude for making administrative procedures a breeze. I am grateful to Dr Arpita Goswami and Dr Amalesh Gope for sharing their expertise on Sylheti with me.

My teachers at IIT, JNU, and St Xavier's College, Mumbai have each contributed their point-of-view in my academic development. I must first acknowledge the St. Xavier's anthropology department, particularly Dr Pranoti Sapre, Fr. Arun and Fr. Joseph for instilling a critical outlook and teaching me to 'problematize the obvious'. From JNU, I want to thank Professor Pandey for imparting rigorous training in phonological analysis in his courses, without which I could not have begun my PhD, let alone finished it. I thank the late Professor Franson Manjali for teaching us to question and be conscious of the ideological underpinnings of the discipline always. I also must thank Professor Ayesha Kidwai for guiding us in the praxis of linguistics research. Her Introduction to Linguistics and Research Methodology courses have been appropriate bookends of my linguistic training.

Next, I must acknowledge the friends, flatmates, classmates, and fellow researchers who have been a second family for me in Delhi. I would like to thank Tanuj for always being ready to share a cup of tea and discuss phonological theory or department gossip any time. She has been

a fellow traveller, both literally and metaphorically, without whom the journey would not have been as fun. The same goes for Vyom, who has been my classmate, friend, and flatmate as long as we have both been linguists. Thank you for being ready to both attend talks or skip classes with me and walking together through the PhD journey from start to finish. I thank Huzaifa for many years of sharing his *bakwaas* with me and engaging in equally long and involved discussions over philosophy, politics, literature and language. Fuzail has been a terrific friend over these years. His practical advice on editing has been invaluable, as have been pizza nights, biryani nights, and burger nights, in getting through the long days of writing. I would not be exaggerating if I say that Semanti in some ways is the person who made me believe I could actually complete my PhD. She has been an invaluable support, and I can never thank her enough for her advice and friendship during this time. Garvi, Karishma, and Vinita, thank you for the group chats, reels, and memes that reminded me of life outside the academic bubble.

Last, I thank my family, whose contribution and support cannot be summed up in a few words. My father, Yash Mohan Prasad for encouraging me to explore my own path, and for his advice on dealing with people and networking. Mayank Prasad and Natasha D'Silva, thank you for being amazing hosts and restoring my sanity when needed. I must also thank Mayank for giving me a crash course in data analysis and presentation to help me create the charts and figures needed from my woefully messy data. Mothers can never be thanked enough, but I have to thank Sutapa Prasad twice at least, first and foremost for supporting my pursuits. Second, for being an invaluable resource for Sylheti data and coming up with examples and materials for experiments on long calls. And of course, for speaking the Sylheti language, which I have been fascinated with since childhood, and which ultimately became my research topic for this thesis.

I could not have completed this dissertation without the help of the people mentioned above (and a few others I may have missed).

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 (*ɛk ɟ̬in* [ɛɣɟ̬in] 'one day') and initial aspiration (*kisu* [kʰisu] '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 स्पिरेंटाइजेशन 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 हैं की इस नियम का अन्य ध्वन्यात्मक प्रक्रियाओं जैसे वोइसिंग एसिमिलेशन ([ɛɣ#d̪in] 'एक दिन') और शुरुआती aspiration ([kʰisu] 'कुछ';) के साथ इंटरैक्शन होता है। डेटा से यह भी पता चला है कि ऑर्थोग्राफ़िक प्रतिनिधित्व का वेलर ऑब्स्ट्रुएंट के ध्वन्यात्मक अहसास पर बहुत सीमित प्रभाव पड़ा है।

Table of Contents

List of Figures

List of Tables

List of Abbreviations

Language Family and Language Variety[1]

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
Rl	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 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_1C_1	Geminate
C_1C_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	Homoraganic 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)