May 7, 2024

Department of Linguistics, The University of Hong Kong Run Run Shaw Tower, Pokfulam Road, HK Email: baichen@connect.hku.hk URL: https://baichen-du.github.io

RESEARCH INTERESTS

Topics **Phonetics & Phonology:** Experimental and developmental phonology and phonetics, acoustic, auditory, and articulatory phonetics, speech perception, sound change, multiple cues

EDUCATION

DEGREE PROGRAMS

2025- University of California, Los Angeles

DOCTOR OF PHILOSOPHY IN LINGUISTICS

2025- University of California, Los Angeles

MASTER OF ARTS IN LINGUISTICS

The University of Hong Kong

BACHELOR OF SOCIAL SCIENCES (FIRST CLASS HONOURS) *Majors:* Politics and Public Administration; Linguistics *Advisors:* Jonathan Havenhill, Haohan Chen

Non-degree trainings

2023 University of California, Berkeley, Undergraduate Visiting Student

Korea University, International Summer and Winter Campus

The Luso-Brazillian Association of Linguistics

Publications & Manuscripts

INVITED ARTICLES

2022

2021

2024

To appear

2023

Du, B., Pfiffner, A., Johnson, K. Visible articulatory variation as a cue to sound change: Lip rounding and lip protrusion variability in the Mandarin sibilant merger. *University of Pennsylvania Working Papers in Linguistics*, 30(2).

CONTRIBUTED ARTICLES

In prep **Du, B.,** Alexandra A. Multiple and cross-modality cue integration and weighting: Lip rounding and acoustic cues in the Mandarin sibilant merger

Du, B. Acoustic distance effect on the perception of sibilants mergers between retroflexes and alveolars in Taiwan Mandarin. In *Proceedings of Seventh Annual Berkeley Undergraduate Linguistics Symposium 2023*. Linguistic Society of University of California, Berkeley, CA

To appear Do, Y.*, Van Hoey, T., Yu, X., **Du, B.**, Tan, L. Implicit and explicit learning of vowel harmony patterns in phonotactics and alternations. *Linguistics Vangard*

Du, B. The backfire effect in the perception and judgement of congruent and incongruent interpretation of political propaganda. Undergraduate Thesis of Political Psychology, University of Hong Kong, HK.

Presentations

(As presenting author)

Workshops

Du, B. Introduction to Advanced R Programming with RMarkdown. The Sociolinguistic Lab at UC Berkeley.

Conference Papers and Posters

- **Du, B.**, Pfiffner, A., Johnson, K. The role of visible articulatory variation in the Mandarin sibilant contrast and merger. Paper presented at the 98th Annual Meeting of Linguistic Society of America (LSA2024), New York City, NY.
- Havenhill, J, **Du**, **B**. The role of visual cues in sound change: A cross-modality perceptual account for the typological rarity of labial palatalization. Poster presented at the 185th Meeting of Acoustical Society of America (ASA185), Sydney, Australia.
- **Du, B.**, Pfiffner, A., Johnson, K. Consonant and vowel rounding: same acoustics, different visuals. Poster presented at the 185th Meeting of Acoustical Society of America (ASA185), Sydney, Australia.
- Du, B., Pfiffner, A., Johnson, K. Visible articulatory variation as a cue to sound change: Lip rounding and lip protrusion variability in the Mandarin sibilant merger. Paper presented at New Ways of Analyzing Variation 51 (NWAV51), Queens College CUNY, New York City, NY.
- Du, B. Acoustic distance effect on the perception of sibilants mergers between retroflexes and alveolars in Taiwan Mandarin. Poster presented at the 184th Meeting of Acoustical Society of America 2023 (ASA 184), Chicago, IL.
- Du, B. An audio-visual account for synchronic sound changes towards sibilants merger in Taiwan Mandarin. Paper presented at the Seventh Annual Berkeley Undergraduate Linguistics Symposium 2023, University of California, Berkeley, CA.
- **Du, B.** The backfire effect in the perception and judgement of congruent and incongruent interpretation of political propaganda. Poster presented at Undergraduate Research Fellowship Program Poster Session: Student Research Posters, University of Hong Kong, HK.

Honors and Awards

2023	Ms Cecilia Vong Prize of Linguistics	HK\$1,000
2022	Globalink Research Award, Mitacs	CA\$12,000
2022	Undergraduate Research Fellowship	HK\$10,000
2022	K.K.Ho Prize	US\$2,560
2022	Dean's Honor List	
2021	Dean's Honor List	
2020	Dean's Honor List	
2019	Soong Ching-ling Foundation Scholarship	US\$ 30,700

GRANTS AND FUNDINGS

2023 Down Funder Student Travel Funding, ASA:

US\$1,000

185th Meeting of Acoustical Society of America & 2023 Meeting of the Australian Acoustical Society, Syndey

UC Berkeley Departmental Instruction Grants:

US\$600

Audiovisual production of Mandarin sibilants & Cross-modal cue integration and weighting in the perception of Mandarin high front vowel contrast

HKU Transdisciplinary Undergraduate Research Initiative Grant:

HK\$3,830

An audio-visual account for linguistic and social selectivity in the accommodation to sibilant mergers in Mandarin

HKU Leung Kau Kui Research and Teaching Endowment:

US\$1,300

The backfire effect in the perception and judgement of congruent and incongruent interpretation of political propaganda

RESEARCH EXPERIENCE

Undergraduate Experience

Korean tonogenesis among native and heritage speakers Multiple adaptive cue weighting in Korean palatal contrast Mandarin sibilant merger and differential cue weightings

UC Berkeley

PI: Dr. Keith Johnson

2022

2022

2023

2023

2023

2022

Roles: Independent projects on cue weightings and bilingualism, study design, experimentation, analyses and manuscript preparation.

Integration of emotion in speech perception

Polytechnic University of Hong Kong

PIs: Dr. Keith Johnson, Dr. Yao Yao

Roles: Leading project on smiling speech. Study design, experiment programing, administering audiovidual production, facial expression tracking and action unit analysis, audiovisual alignment and segmentation.

Audiovisual perception of Korean labial palatalization

University of Hong Kong

PIs: Dr. Jonathan Havenhill

Roles: Acoustic analysis, speech manipulation and synthesis with KlattGrid, audiovisual stimuli creation, experiment programming, analyses and presentation

2022 The ManyBaby project

University of Manitoba

PI: Prof. Melaine Soderstrom.

Roles: Acoustic measurement, statistical modelling of prosodic changes in Child Directed Speech

The backfire effect in the perception of political views

University of Hong Kong

Advisor: Dr. Haohan Chen

Roles: Conducting this independent study, including web data extraction using R, analyzing and interpreting text data. Compiling tutorials of advanced data science course of POLI3148: Data Science in Politics and Public Administration.

2021-22 Learnability of vowel rounding harmony for kids and adults

University of Hong Kong

PI: Dr. Youngah Do

Roles: Study design, stimuli creation, experiment programming, data analysis, manuscript preparation

SKILLS

Language English, Mandarin, Cantonese

Scripting R, Praat Scripting, LTEX, Markdown, HTML, Python

Tools Statistics: RStudio, jamovi

Experiment: PsychoPy, EyeLink 1000 Plus, Pavlovia.org

Measurement: Praat, OpenFace, Qualtrics

Processing: Klatt Synthesis, Montreal Forced Alignment, TANDAM-STRAIGHT, ffmpeg, ELAN, Polly

Recruitment: Mechanical Turk, Prolific

Others Statistical Modelling: Frequentist and Bayesian statistics (e.g., Linear/Generalized Mixed Effects Re-

gression), Structural Equation Modeling (e.g., EFA, CFA, Latent Growth Model, Multi-level Modelling),

Text Data Processing: web data extraction, topic modelling, sentiment analysis **Computer Vision:** Facial Landmarks Tracking, Emotion Detection, Eye Tracking

MEMBERSHIPS AND SERVICES

2023-	Acoustical Society of America	Student member
2021-	Linguistic Society of America	Student member
2023	Mitacs	Globalink Research Ambassador
2022	Undergraduate Buddy Program	Mentor to Fu Jia'ni
2021-23	Chinese Culture Committee at R.C.Lee Hall	Chariperson
2020-21	Social Service Fund, HKUSU	External Secretary
2021	Pad for Hope Foundation	Teaching Assistant
2020	University Service Centre of CUHK	Student Helper