University of Kansas Department of Linguistics Blake Hall 417 1541 Lilac Lane Lawrence, KS 66045 United States

Phone: +1 785-864-6021 Email: jjh@ku.edu

Homepage: http://jjholliday.github.io/

#### Education

2012, Ph.D. Linguistics, The Ohio State University, Columbus, Ohio.

Thesis: The emergence of L2 phonological contrast in perception: The case of Korean sibilant fricatives.

Committee: Mary Beckman (advisor), Cynthia Clopper, Shari Speer

2011, M.A. Linguistics, The Ohio State University, Columbus, Ohio.

2003, B.S. Accounting (minor in Japanese), The Ohio State University, Columbus, Ohio.

### **Employment**

8/2023—present, University of Kansas, Lawrence, KS, USA Assistant Professor, Department of Linguistics Core faculty, Center for East Asian Studies

9/2015—7/2023, Korea University, Seoul, South Korea Assistant Professor, Department of Korean Language and Literature

8/2012—5/2015, Indiana University, Bloomington, IN, USA Postdoctoral Fellow, Department of Second Language Studies

# External funding

National Research Foundation (ROK) Collaborative Research Grant (#2017068448). Project title: "영 어음운습득을 향한 개인별 경로의 양적연구: 학습자의 사회인지적 요인 특성을 중심으로 (*Individual Paths to English Sound Acquisition: Focusing on Korean Learners' Socio-Cognitive Traits*)" PI: Jeffrey Holliday; Co-PIs: Eun Jong Kong, Hyunjung Lee. ¥115,750,000 (US \$103,558), November 2017 - October 2019.

National Science Foundation (US) Doctoral Dissertation Research Improvement Grant (BCS-1024286). Project title: "Native-Language and Native-Dialect Effects in Learning to Perceive a Difficult Phonetic Contrast in Korean". PI: Mary Beckman; Co-PI: Jeffrey Holliday. \$9,660, July 2010 - June 2012.

Department of Education (US) Title VI Foreign Language and Area Studies Summer Fellowship, 2010.

# Peer-reviewed journal publications

\* indicates student co-author

Lee, H., Kong, E. J., & Holliday, J. J. (Submitted). The perception and production of Korean stops in second dialect acquisition.

- Kong, E. J., Lee, H., & **Holliday**, **J. J.** (2023). Executive function and Korean children's stop production. *Phonetics and Speech Sciences*, 15(3), 45–52.
- **Holliday, J. J.**, Walker, A., \*Jung, M., & Cho, E. (2023). Bringing indexical orders to non-arbitrary meaning: The case of pitch and politeness in English and Korean. *Laboratory Phonology*, 14(1).
- Jung, H. & Holliday, J. J. (2022). Interpreting within- and between-speaker variability in L2 Korean stop productions. *Korean Linguistics*, 94, 31–55.
- Kong, E. J., **Holliday**, **J. J.**, & Lee, H. (2022). Post-adolescent changes in the perception of regional sub-phonemic variation. *Journal of Phonetics*, 90, 101114.
- \*Choi, M.-K., **Holliday**, **J. J.**, & Munson, B. (2021). The influence of lexical characteristics and talker accent on the recognition of English words by native speakers of Korean. *Journal of the Acoustical Society of America*, 150(2), 769–782.
- **Holliday, J. J.** & Lee, H. (2021). The role of socio-indexical information in the perception of Gyeongsang fricatives. *Korean Linguistics*, *90*, 165–187.
- Shin, W., \*Lee, H., Shin, J., & **Holliday**, **J. J.** (2020). The potential role of talker age in the perception of regional accent. *Language and Speech*, 63(3), 479–505.
- \*Ngaihte, C. N., **Holliday**, **J. J.**, & Berkson, K. H. (2020). A phonetic investigation of some temporal properties of Paite obstruents. *Studies in Phonetics*, *Phonology*, and *Morphology*, 26(2), 341–363.
- Lee, H., **Holliday**, J. J., & Kong, E. J. (2020). Diachronic change and synchronic variation in the Korean stop laryngeal contrast. *Language and Linguistics Compass*, 14(7), e12374.
- **Holliday, J. J.** & \*Hong, M. (2020). Non-word repetition may reveal different errors in naive listeners and second language learners. *Phonetics and Speech Sciences*, 12(1), 1–9.
- **Holliday**, **J. J.** (2019). The perception and production of word-initial Korean stops by native speakers of Japanese. *Language and Speech*, 62(3), 494–508.
- Holliday, J. J., Turnbull, R., & Eychenne, J. (2017). K-SPAN: A lexical database of Korean surface phonetic forms and phonological neighborhood density statistics. *Behavior Research Methods*, 49, 1939–1950.
- **Holliday, J. J.** (2016). Second language experience can hinder the discrimination of nonnative phonological contrasts. *Phonetica*, 73, 33–51. doi: 10.1159/000443312
- **Holliday, J. J.**, Reidy, P. F., Beckman, M. E., & Edwards, J. (2015). Quantifying the robustness of the English sibilant fricative contrast in children. *Journal of Speech, Language, and Hearing Research*, 58, 622–637. doi: 10.1044/2015\_JSLHR-S-14-0090
- **Holliday, J. J.** (2015). A longitudinal study of the second language acquisition of a three-way stop contrast. *Journal of Phonetics*, 50, 1–14. doi: 10.1016/j.wocn.2015.01.004
- **Holliday**, **J. J.** (2014). The perception of Seoul Korean fricatives by listeners from five different native dialect and language groups. *Korean Linguistics*, 16(2), 91–108. doi: 10.1075/kl.16.2.01hol
- **Holliday, J. J.** (2014). The perceptual assimilation of Korean obstruents by native Mandarin listeners. *Journal of the Acoustical Society of America*, 135(3), 1585–1595. doi: 10.1121/1.4863653
- **Holliday, J. J.** (2012). The acoustic realization of the Korean sibilant fricative contrast in Seoul and Daegu. *Phonetics and Speech Sciences*, 4(1), 67–74. doi: 10.13064/KSSS.2012.4.1.067

### Refereed conference proceedings, chapters, and letters

**Holliday, J. J.**, Kong, E. J., Lee, H. (2023). The effects and interaction of age and region on the acoustic realization of the Korean stop contrast. *Proceedings of the 20th International Congress of Phonetic Sciences (ICPhS XX)*.

Holliday, J. J. (2022). Phonological acquisition. In A. S. Byon & D. O. Pyun (Eds.), *The Routledge Handbook of Korean as a Second Language* (pp. 32–50). Routledge. doi: 10.4324/9781003034704

Martinez-Garcia, M. T., **Holliday**, **J. J.** (2019). The perception of Korean stops by native speakers of Spanish. *Proceedings of the 19th International Congress of Phonetic Sciences (ICPhS XIX)*.

Lee, H., Kong, E. J., **Holliday**, **J. J.** (2019). An investigation of the effect of L1 dialect on the L2 perception of lexical stress. *Proceedings of the 19th International Congress of Phonetic Sciences (ICPhS XIX)*.

Darcy, I., & Holliday, J. J. (2019). Teaching an old word new tricks: Phonological updates in the L2 mental lexicon. Proceedings of PSLLT 10.

Politzer-Ahles, S., **Holliday**, **J. J.**, Girolamo, T., Spychalska, M., & Berkson, K. H. (2016). Is linguistic injustice a myth? A response to Hyland (2016). *Journal of Second Language Writing*, 34, 3–8.

**Holliday**, **J. J.**, Turnbull, R. (2015). Effects of phonological neighborhood density on word production in Korean. *Proceedings of the 18th International Congress of Phonetic Sciences (ICPhS XVIII)*.

Kallay, J., **Holliday**, **J. J.** (2012). Using spectral measures to differentiate Mandarin and Korean sibilant fricatives. *Proceedings of INTERSPEECH* 2012. 118–121.

**Holliday**, J. J., Kong, E. J. (2011). Dialectal variation in the acoustic correlates of Korean stops. *Proceedings of the 17th International Congress of Phonetic Sciences (ICPhS XVII)*. 878–881.

**Holliday**, J. J., Beckman, M. E., Mays, C. (2010). Did you say susi or shushi? Measuring the emergence of robust fricative contrasts in English- and Japanese-acquiring children. *Proceedings of INTERSPEECH* 2010. 1886–1889.

**Holliday, J. J.** (2010). An acoustic study of L2 perceptual acquisition of Korean fricatives. In Ik-Hwan Lee (ed.), *Harvard Studies in Korean Linguistics XIII*. Cambridge, MA: Harvard University.

# Conference presentations without proceedings

\*Hong, M., Holliday, J. J. "The role of L2 English in the perception of L3 Korean sibilants by L1 speakers of French and Vietnamese." Poster presented at Hanyang International Symposium on Phonetics and Cognitive Sciences of Language 2023 (HISPhonCog 2023). Hanyang University, Seoul, South Korea. May 26-27, 2023.

\*Zhang, S., Holliday, J. J. "Phonetic targets in the clear speech vowel productions of native Chinese learners of Korean." Poster presented at Hanyang International Symposium on Phonetics and Cognitive Sciences of Language 2023 (HISPhonCog 2023). Hanyang University, Seoul, South Korea. May 26-27, 2023.

Walker, A., **Holliday**, **J. J.**, \*Jung, M., Cho, E. "A closer look at the sound of politeness in Korean." Talk to be given at New Ways of Analyzing Variation – Asia-Pacific 6 (NWAV-AP 6). National University of Singapore, Singapore. February 17-20, 2021.

\*Choi, M., Holliday, J. J., Munson, B. "The influence of lexical characteristics and talker accent on the recognition of English words by speakers of Korean." Poster presented at the 178th meeting of the Acoustical Society of America. San Diego, CA, USA. December 2-7, 2019.

\*Jung, M., Holliday, J. J., Walker, A., \*Cho, E. "Sounding Polite in Korean: The role of Pitch, Gender, and Grammatical form." Talk given at the 2019 Seoul International Conference on Speech Sciences. Seoul National University, Seoul, South Korea. November 15-16, 2019.

4

- \*Hong, M., \*Jung, H., \*Ngaihte, C. N., **Holliday, J. J.** "The effect of stimulus length on the L2 perception of Korean stops." Poster presented at New Sounds 2019. Waseda University, Tokyo, Japan. August 30 September 1, 2019.
- \*Hong, M., \*Jung, H., \*Ngaihte, C. N., **Holliday, J. J.** "선·후행 음절에 따른 L2 학습자의 한국어 폐쇄음 지각 양상." Talk given at 2019 Spring meeting of the Korean Society of Speech Sciences. Yonsei University, Seoul, South Korea. June 1, 2019.
- \*Cho, E., Walker, A., \*Jung, M., **Holliday, J. J.** "A problem for the frequency code? A perceptual study of the relationship between pitch and politeness in Korean." Talk given at the Southeastern Conference on Linguistics (SECOL 2019). Boca Raton, FL, USA. May 30-June 2, 2019.
- \*Ngaihte, C. N., **Holliday, J. J.** "Asymmetry in the perceptual assimilation of the Korean laryngeal contrast by Indian listeners." Poster presented at Hanyang International Symposium on Phonetics and Cognitive Sciences of Language 2019 (HISPhonCog 2019). Hanyang University, Seoul, South Korea. May 24-25, 2019.
- Holliday, J. J. "Linking L2 production to orthographic transcription." Talk given at the Joint 17th Conference on the Processing of East Asian Languages and the 9th Conference on Language, Discourse, and Cognition (ICPEAL 17 CLDC 9). National Taiwan University, Taipei, Taiwan. October 19-21, 2018.
- Darcy, I., **Holliday, J. J.** "Are phonological updates in the L2 mental lexicon perceptually driven?." Talk given at the 10th Annual Conference on Pronunciation in Second Language Learning and Teaching. Iowa State University, IA, USA. September 6-8, 2018.
- Darcy, I., **Holliday**, **J. J.** "Teaching an old word new tricks: Phonological updates in the L2 mental lexicon." Talk given at the 16th Conference on Laboratory Phonology. Lisbon, Portugal. June 19-22, 2018.
- Holliday, J. J., Turnbull, R. "Failure to find effects of phonological neighborhood density on vowel production in Korean." Poster presented at the 16th Conference on Laboratory Phonology. Lisbon, Portugal. June 19-22, 2018.
- **Holliday, J. J.** "The Korean alveolopalatals you've probably never heard of." Talk given at the Symposium for Celebrating Mary Beckman's Contributions to Laboratory Phonology at LabPhon 16. Lisbon, Portugal. June 19, 2018.
- Holliday, J. J., Kong, E. J. "Beliefs and attitudes towards 'short tongue' pronunciation in Korean." Poster presented at the 2018 Spring meeting of the Korean Society of Speech Sciences. Daejeon, South Korea. May 26, 2018.
- \*Choi, M., Holliday, J. J., Munson, B. "The influence of lexical characteristics and talker accent on the recognition of English words by speakers of Korean." Poster presented at the 175th meeting of the Acoustical Society of America. Minneapolis, MN, USA. May 7-11, 2018.
- Turnbull, R., **Holliday**, **J. J.** "Korean vowel articulation is not sensitive to phonological neighborhood density." Poster presented at the 25th Japanese/Korean Linguistics Conference. University of Hawai'i at Mānoa, HI, USA. October 12, 2017.
- Holliday, J. J., Kong, E. J. "Acoustic evidence from spontaneous speech for sound change in Korean sibilants." Poster presented at the 4th Workshop on Sound Change. Edinburgh, Scotland. April 21, 2017.

Shin, W.-B., \*Lee, H.-W., **Holliday**, **J. J.**, Shin, J. "The perception of Korean regional dialects is mediated by talker age." Poster presented at the 24th Japanese/Korean Linguistics Conference. Tokyo, Japan. October 14-16, 2016.

- Holliday, J. J., Reidy, P. F. "Dynamic aspects of the production and perception of Korean sibilant fricatives." Poster presented at Satellite Workshop on Dynamics and Representation of Turbulent Sounds at LabPhon 15. Ithaca, NY, USA. July 13, 2016.
- **Holliday, J. J.** "Individual differences in perceptual assimilation, phonological equivalence, and L2 production" Talk given at New Sounds 2016 special session on Individual Differences in Executive Function and Phonological Processing: Implications for L2 Speech Acquisition. Aarhus, Denmark. June 10, 2016.
- Kong, E. J., **Holliday**, **J. J.** "An acoustic investigation of affricates in the Seoul Corpus." Poster presented at the 2016 Spring meeting of the Korean Society of Speech Sciences. Gwangju, South Korea. May 20, 2016
- **Holliday, J. J.**, Turnbull, R. "Do effects of phonological neighborhood density on word production obtain in Korean?" Talk given at the 2015 International Conference on Speech Sciences. Ewha Womans University, Seoul, South Korea. November 20-21, 2015.
- Holliday, J. J., Lee, H. "A preliminary investigation of the effect of dialect on the perception of Korean sibilant fricatives." Poster presented at the 168th meeting of the Acoustical Society of America. Indianapolis, IN, USA. October 27-31, 2014.
- Holliday, J. J. "Can learning an L2 make you less accurate at perceiving an L2 contrast?" Poster presented at the 33rd Second Language Research Forum (SLRF 2014). Columbia, SC, USA. October 23-25, 2014.
- **Holliday, J. J.,** Turnbull, R. "An implementation of Korean grapheme-to-phoneme conversion in R." Poster presented at the 19th Mid-Continental Phonetics & Phonology Conference. Madison, WI, USA. September 14, 2014.
- Holliday, J. J. "Using non-word repetition to investigate the link between perception and production in naive listeners and novice learners of Korean." Talk given at the Perception-Production Studies and Corpus-Based Approaches in Second Language Phonetics and Phonology. Waseda University, Tokyo, Japan. July 29, 2014.
- Holliday, J. J. "L2 experience can hinder perception of non-native sounds." Poster presented at the 14th Conference on Laboratory Phonology. Tokyo, Japan. July 27, 2014.
- **Holliday, J. J.** "An acoustic analysis of palatalized Korean sibilant fricatives." Talk given at the 2014 Spring meeting of the Korean Society of Speech Sciences. Chuncheon, South Korea. May 23, 2014.
- Miller, A. L., **Holliday**, **J. J.** "Contrastive apical post-alveolar and laminal alveolar click types in Ekoka !Xung." Poster presented at the 167th meeting of the Acoustical Society of America. Providence, RI, USA. May 8, 2014.
- Holliday, J. J. "Initial reliance on orthography may hinder accurate L2 production in the long-term." Talk given at the 32nd Second Language Research Forum (SLRF 2013). Provo, UT, USA. October 31, 2013.
- **Holliday, J. J.** "Unexpected accents: Probing the relationship between non-native perception and novice L2 production." Talk given at Interspeech 2013 Satellite Workshop on Phonetics, Phonology and Language Contact (PPLC 13). Paris, France. August 21, 2013.

**Holliday, J. J.** "The perceptual assimilation of Korean obstruents by native Japanese listeners." Poster presented at the 2013 Spring meeting of the Korean Society of Speech Sciences. Busan, South Korea. May 24, 2013.

- **Holliday, J. J.**, Kong, E. J. "The acoustic correlates of stop productions in older and younger Jeju speakers." Poster presented at the 2013 Spring meeting of the Korean Society of Speech Sciences. Busan, South Korea. May 24, 2013.
- Miller, A. L., **Holliday**, **J. J.**, Howcroft, D., Phillips, S., Smith, B., Tsui, T., Scott, A. M. "The phonetics of the modern-day reflexes of the proto-palatal click in Juu languages." Talk given at the 4th International Symposium on Khoisan Languages and Linguistics. Riezlern, Austria. July 10, 2011.
- Holliday, J. J. "Inter- and Intra-L1 differences in L2 speech perception". Talk given at the INTER-SPEECH 2010 Satellite Workshop on Second Language Studies: Acquisition, Learning, Education and Technology. Waseda University, Tokyo, Japan. September 22, 2010.
- **Holliday, J. J.** "The perceptual acquisition of Korean fricatives by first language Mandarin listeners". Poster presented at the 159th meeting of the Acoustical Society of America. Baltimore, MD, USA. April 22, 2010.
- Julien, H. M., Munson, B., Edwards, J., Beckman, M. E., **Holliday**, **J. J.** "Modifying speech to children based on perceived developmental level: An acoustic study of adults' fricatives". Poster presented at the 159th meeting of the Acoustical Society of America. Baltimore, MD, USA. April 20, 2010.
- Kaiser, E., Munson, B., Li, F., **Holliday, J. J.**, Beckman, M. E., Edwards, J. Schellinger, S. "Why do adults vary in how categorically they rate the accuracy of children's speech?" Poster presented at the Cross-Language Speech Perception Workshop at the 157th meeting of the Acoustical Society of America. Portland, OR, USA. May 21, 2009.
- Heintz, I., Li, F., **Holliday**, **J. J.** "Comparing computational algorithms for modeling phoneme learning". Talk given at Mid-Continental Workshop on Phonology 14. Minneapolis, MN, USA. October 18, 2008.
- Holliday, J. J. "Modeling acoustic cues to L1 and L2 Korean fricative perception". Talk given at Mid-Continental Workshop on Phonology 14. Minneapolis, MN, USA. October 17, 2008

# Invited talks and guest lectures

- "A longitudinal study of the second language acquisition of a three-way stop contrast" Invited talk for EALL 410/510 "Chinese, Japanese, and Korean Sounds" University of Oregon. November 15, 2023.
- "Accounting for cross-linguistic variability in the relationship between vocal pitch and politeness" Invited colloquium at National Yang Ming Chiao Tung University, Hsinchu, Taiwan. April 21, 2023.
- "Accounting for cross-linguistic variability in the relationship between vocal pitch and politeness" Invited colloquium at National Taiwan University, Taipei, Taiwan. April 19, 2023.
- "The relationship between perception and production in L2 Korean speech research" Invited talk for Workshop on phonetic and psycholinguistic approaches to L2 speech acquisition, co-hosted by Sophia University, Hosei University, and Daito Bunka University, Tokyo, Japan. January 30, 2021.
- "Kimchi vs. Gimchi: The variable role of voicing in cross-linguistic perception of Korean stops" Keynote lecture at the 2018 Autumn meeting of the Korean Society of Speech Sciences, Seoul, South Korea. November 16, 2018.

"An investigation of 'short tongue' pronunciation in Korean" Invited colloquium at National Chiao Tung University, Hsinchu, Taiwan. October 22, 2018.

"The role of talker age in the perception of regional accent" Invited colloquium at Hanyang University, Seoul, South Korea. December 9, 2016.

"The role of dialect in the perception of Korean fricatives" Guest lecture for SLST-T500 "The Perception of Foreign Accent" Indiana University. October 16, 2014.

"The phonetics of Korean" Guest lecture for LING-L306 class "Introduction to Phonetics" Indiana University. April 28, 2014.

"The role of standard language in Korean society" Guest lecture for EALC-E305 class "Korean Language and Culture" Indiana University. October 8, 2013.

"An introduction to OpenSesame" (in Korean) Korean Society of Speech Sciences Summer Workshop. Hannam University, Daejeon, South Korea. July 19, 2013.

"Non-native observations of standard and non-standard Korean" (in Korean) Division of Korean Language & Literature, Busan University of Foreign Studies, Busan, South Korea. May 23, 2013.

# Other awards and internal funding

Korea University Faculty Grant: "L2 Phonology in East Asia II", 2023. \\$8,500,000.

Korea University Faculty Grant: "L2 Phonology in East Asia", 2018-2019. \\$8,500,000.

International Phonetic Association Gösta Bruce Scholarship, 2011. €300.

Best Student Paper Award, INTERSPEECH 2010.

OSU Targeted Investment in Excellence Graduate Fellowship, 2009. 1 semester of funding.

OSU Distinguished University Fellowship, 2007. 2 years of funding.

# **Teaching**

#### University of Kansas

Language and Mind (undergraduate)

Second Language Acquisition I (undergraduate)

Second Language Acquisition II (undergraduate/graduate)

#### Korea University

Introduction to Korean Linguistics (undergraduate)

Korean Sociolinguistics (undergraduate)

Phonetic Analysis of Non-native Korean (undergraduate)

Research Ethics and English Academic Writing (graduate)

Research Methods in Linguistics (graduate)

Quantitative and Experimental Methods in Linguistics (graduate)

Statistical Modeling in Linguistic Research (graduate)

The Phonetics and Phonology of L2 Korean (graduate)

Sociolinguistic Theory (graduate)

#### Indiana University Bloomington

Academic Language and Culture at US Universities (undergraduate)

Second Language Phonology (graduate)

The Ohio State University

Analyzing the Sounds of Languages (undergraduate)

### Advising

PhD: Hwanmin Jung (2020)

MA: Shiyu Zhang (2023), Yeseul Kim (2020), Daseul Kim (2020), Xiangquan Wen (2018), Ximei Yang (2016)

External PhD examiner or committee member: Michaela Watkins (in progress, University of Amsterdam), Jennifer Zhang (2023, UIUC), Drew Crosby (2023, University of South Carolina)

#### Academic service

#### External

Associate Editor for Second Language Research (2022-)

Association for Laboratory Phonology, Events and Outreach Committee (2018-)

Organizing Committee member: LabPhon 19; INTERSPEECH 2022; 2017, 2019 Seoul International Conference on Speech Sciences

Sociolinguistics Area Chair for 14th International Symposium on Bilingualism (ISB14)

Manuscript reviewing for: Applied Linguistics; Applied Psycholinguistics; Bilingualism: Language and Cognition; Clinical Linguistics & Phonetics; Computer Speech & Language; Frontiers in Psychology; Glossa; International Journal of Bilingualism; Journal of the Acoustical Society of America; Journal of the International Phonetic Association; Journal of Speech, Language, and Hearing Research; Journal of Phonetics; Journal of Second Language Pronunciation; Laboratory Phonology; Language; Language Learning; Language and Linguistics (Academia Sinica); Language and Speech; Lingua; Linguistic Approaches to Bilingualism; Phonetica; Second Language Research; Studies in Second Language Acquisition

Abstract reviewing for: LabPhon 17, 18; New Sounds 9, 10; ICPhS 2019, 2023; PACLIC 32, 33, 34; Japanese/Korean Linguistics 28, 30, 31

Judge, Best Student Paper competition, 168<sup>th</sup> Meeting of the Acoustical Society of America

#### **Departmental**

2012-2015, Coordinator, Phonetics Literature Enjoyment Group Meeting, IU

2008-2012, Coordinator, Language Acquisition Discussion Group, OSU

2008-2009, President, Student Linguistics Association, OSU

2007-2009, Speakers committee, Department of Linguistics, OSU

# Professional memberships

Association for Laboratory Phonology

International Phonetic Association (Lifetime member)

Korean Society of Speech Sciences (Lifetime member)

Linguistic Society of America (Lifetime member)

### Miscellaneous

Computing skills

R, OpenSesame, Praat

Natural languages

English (native and fluent)

Korean (fluent, OPI "Superior")

Japanese (elementary), Mandarin (very elementary), French (reading only)

Last updated: February 23, 2024