

SANTIAGO ARRÓNIZ-PARRA
CURRICULUM VITAE

Ph.D. Candidate
Department of Spanish & Portuguese
Department of Linguistics
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**RESEARCH
STATEMENT**

My research journey has centered on two distinct yet interconnected areas of linguistic inquiry, both grounded in the complexities of the Spanish language. The first area explores phonological variation, utilizing an empirical, experimental approach that contrasts with earlier impressionistic analyses, following the principles of Laboratory Phonology. The second area focuses on suprasegmental features in Spanish, applying machine learning techniques from Natural Language Processing. Together, these research threads have contributed to our understanding of Spanish phonology and its interaction with emerging technologies.

EDUCATION

Indiana University, Bloomington, IN (United States)
Dual Ph.D., Hispanic Linguistics & Computational Linguistics, August 2019 - May 2025 (expected)
Master of Arts, Hispanic Linguistics, May 2018

University of Seville, Seville (Spain)
Master of Arts, Linguistics, Literature, and Cultural Studies, June 2019
Bachelor of Arts, English Studies, June 2015

Manchester Metropolitan University, Manchester (United Kingdom)
Erasmus Exchange Program, Faculty of Languages, Linguistics and TESOL, Academic year 2013 - 2014

**RESEARCH
PROGRAM**

DISSERTATION

More than frication: Compensatory cues of /s/ reduction in voiced stop consonants in Western Andalusian Spanish

My dissertation investigates the fricativization of voiced stops as a compensatory process of coda /s/ lenition in Western Andalusian Spanish (WAS): /-s/ + /b, d, g/ → [v, ð, ɣ]. It revolves around two main research questions with two distinct goals: first, to provide a linguistic analysis of the phonetic realization of /s/ + voiced stops /b d g/ in WAS; and second, to examine how are phonemic /s/ + voiced stops /b d g/ perceived in WAS. In order to address the first research question, speech samples were collected using a semi-guided sentence completion task, which were acoustically analyzed according to the degree of friction, duration of the segment, intensity, zero-crossings, and spectral moments. Results showed that CVFs exhibit a greater degree of friction (z-crossings and observable energy in higher frequencies) and a longer duration than their approximant counterparts. In order to address the second research question, three different perceptual tasks were administered to 80 listeners from WAS. An AX discrimination task showed that WAS listeners can effectively discriminate between purely phonetic, approximant [β ð ɣ] vs. fricative [v ð ɣ] productions in isolated speech. Secondly, an Identification task demonstrated that WAS listeners associated the fricative singletons [v ð ɣ] with an underlying /-s/ + /b, d, g/ phonological structure, as opposed to listeners from a different dialect (Mexicans). Finally, a Visual Analog Slider showed that fricative segments of shorter duration were paired with lexical items in the singular form, implying an association of these segments with an intervocalic approxi-

mant production [β ð ɣ], while fricative segments with longer duration were identified with plural lexical items, despite /s/ not being physically realized in the stimuli.

Results from both the production and the perceptual experiments show that the fricative allophones [v ð ɣ] were produced and perceived as a phonological manifestation of /s/ plus /b d g/ by WAS listeners, showing evidence for a new compensatory strategy in this speech community. This resolution strategy of coda /s/ now yields three discrete allophonic realizations derived from phonemic /b d g/, namely an occlusive, an approximant, and a fricative production when preceded by an elided /s/.

OTHER RESEARCH PROJECTS

Automatic Classification of Discourse Meaning in Spanish

This project examines the effectiveness of different feature representations of audio data in accurately classifying discourse meaning in Spanish using different machine learning algorithms. The task involves determining whether an utterance is a declarative sentence, an interrogative, an imperative, etc. I explore how pitch contour can be represented for a discourse-meaning classification task, employing three different audio features: MFCCs, Mel-scale spectrograms, and chromagrams.

SEÑAL: Computational Assessment of L2 Spanish compositions

SEÑAL is an ongoing collaborative project intended to evaluate different components of essays written by students of Spanish as a second language. Among other functions, SEÑAL can currently provide a lexical-syntactic analysis of the complexity of an L2 essay, information about the frequency of various grammatical forms (such as nouns, adjectives, adverbs, and various verb tenses), a spelling and grammatical agreement checker, and a text classifier using machine learning techniques.

CORPESCO: CORPus Prosódico del ESpañol Contemporáneo

With this ambitious, long-term project, I work on the creation of a Spanish intonation corpus for the prosodic and sociolinguistic analysis of different speech varieties of Spanish. Although there is a range of spoken corpora in Spanish describing different varieties of Spanish, the resources created specifically for the prosodic study of Spanish are few. Using a sentence reading task and an Oral Discourse Completion Task questionnaire to elicit formal speech, the corpus currently contains speech samples of nine different speakers, representing the speech from Central Peninsular Spain, Southern Peninsular Spain, and Puerto Rico. Although still on its early stages, the corpus can be used qualitatively and quantitatively for a variety of research purposes and applications in Natural Language Processing and Sociophonetic studies. With this project I intend to incorporate a wider variety of voices, not only from standard dialects, but also from local, underrepresented communities.

PUBLICATIONS

2024

Arróniz, S. (forthcoming 2025). La variación gramatical-léxica del español de Filipinas. In Díaz-Campos, M. & Hernández-Campoy, J. M. (Eds.) *Enciclopedia Concisa de los Dialectos del Español*. London: Wiley-Blackwell.

Arróniz, S. and Willis, E. (forthcoming). From one fricative to another: A perception experiment of lost coda /s/ and voiced phonemic stops as fricatives in Western Andalusian Spanish.

2023

Arróniz, S. and Willis, E. (2023). How to resolve the question? Dialectal variation of utterance types in Andalusian and Puerto Rican Spanish. In *University of Pennsylvania Working Papers in Linguistics: Selected Papers from New Ways of Analyzing*

Variation (NWAV 50).

Arróniz, S. and Kuebler, S. (2023). Was that a question? Automatic Classification of Discourse Meaning in Spanish. In *Proceedings of 14th Conference Recent Advances in Natural Language Processing*. Edited by Galia Angelova, Maria Kuniolkovskaya, and Ruslan Mitkov. INCOMA Ltd., Shoumen, Bulgaria.

2022 **Arróniz, S. and Padilla Cruz, M** (2022). Joke identification, comprehension and appreciation by Spanish intermediate ESL learners: an exploratory study. *The European Journal of Humour Research*, 10 (1), 108-133.

2019 **Arróniz, S.** (2019). Joke comprehension by Spanish B2 level learners of English. *Master's Thesis*. Universidad de Sevilla, Sevilla.

WORKING PAPERS

2021 **Arróniz, S., & Coulter-Kern, M. D.** Who's motivated to trill?: A sociolinguistic study on the acquisition of Spanish trills in heterosyllabic sequences. *IULC Working Papers*, 21(1).

Coulter-Kern, M. D., & Arróniz, S. Teaching Responses to Invitations through Face-To-Face and Computer-Mediated Communication in the Spanish Classroom. *IULC Working Papers*, 21(2).

MANUSCRIPTS

2021 **Agrawal, A., Arróniz, S., and Restrepo-Ramos, F.** *Did they actually tweet this?* Abusive Language Detection over time.

2020 **Arróniz, S.** Computer-Assisted Language Learning: Testing Morphological Structures in L2 Spanish.

Arróniz, S. and Coulter-Kern, M. Who is motivated to trill? A cross-sectional sociolinguistic study investigating the acquisition of trills following heterosyllabic consonants.

Arróniz, S. Intonation and attitudes: Examining language attitudes toward Catalan by Peninsular Spanish speakers.

Arróniz, S. High, or super-high, that is the question: Examining the role of pitch range in Peninsular Spanish

2019 **Arróniz, S.** The acquisition of intonation by L2 Spanish students (Proposal).

2018 **Arróniz, S.** Intonational Patterns and Perception: A Contrastive Analysis between Peninsular and Puerto Rican Spanish.

Arróniz, S. Inovação linguística na poesia de Mário de Sá-Carneiro.

Arróniz, S. Estrategias de descortesía en el aula de español como L2.

- 2017** **Arróniz, S. and Coulter-Kern, M.** A study of the production of trills after heterosyllabic consonants in non-native Spanish learners.
- Arróniz, S.** Africación de los grupos /st/, /kt/ y /pt/: Una evolución de la post-aspiración en Andalucía.
- Arróniz, S. and Coulter-Kern, M.** Fortición de la consonante palatal sonora: Un estudio explotatorio.
- 2016** **Arróniz, S.** Aspiración de /s/ en Posición Inicial de Sílabas: Un Estudio Sociolingüístico en el Habla Regional del Sur de España.
- Arróniz, S.** Giving response to gratitude expressions in bilingual contexts: A contrastive analysis between American English and Spanish.

PRESENTATIONS

- 2024** **Willis, E., Arróniz, S., Galarza, I. and Delgado-Díaz, G.** The variable compensation of lost coda /s/ in Puerto Rican Spanish: Perception by Puerto Rican and Mexican listeners *New Ways of Analyzing Variation 52* Hosted by Florida International University and the University of Miami, Miami, FL. November 2024 (accepted for presentation).
- Arróniz, S.** Gradience vs. Categories: Compensatory Voiced Fricatives and the role of duration in Western Andalusian Spanish *24 Hispanic Linguistics Symposium*. Hosted by University of Nebraska. Omaha, NE. October 2024.
- Willis, E., Arróniz, S., Galarza, I., and Delgado-Díaz, G.** Puerto Ricans may eat their eses, but the taste remains: the perception (or lack) of voiced stops as compensation for deleted coda /s/ by Puerto Rican and Mexican listeners. *11th International Workshop on Spanish Sociolinguistics*. Hosted by The State University of New York, Buffalo. April 2024.
- 2023** **Arróniz, S., and Willis, E.** Fricativization of /b, d, g/ as a compensatory allophony in Western Andalusian Spanish. *Presented at the Hispanic Linguistics Symposium*. Hosted by Brigham Young University. Provo, UT. October 2023.
- Arroniz, S., and Kuebler, S.** Was That a Question? Automatic Classification of Discourse Meaning in Spanish *Presented at Recent Advances in Natural Language Processing*. Varna, Bulgaria. July 2023.
- Restrepo Ramos, F., and Arroniz, S.** SEÑAL, The Computational Assistant for the Analysis and Assessment of Spanish Second Language Writing. *Presented at the Computer Assisted Language Instruction Consortium Conference*. Hosted by University of Minnesota. Minneapolis, MN. June 2023.
- Arróniz, S., and Willis, E.** From one fricative to another: a perception experiment of coda /s/ and voiced phonemic stops as fricatives in Western Andalusian Spanish. *Presented at Congreso Internacional de Fonética Experimental*. Hosted by Universidad de Vigo. Vigo, Spain. June 2023.
- Arróniz, S.** Speech Corpus of Spanish Intonation: Exploring Automatic Detection and Classification of Sentence Meaning in Spanish. *Presented at ClingDing Research Group*. Indiana University - Bloomington. April 2023.

- 2022** **Arróniz, S., and Willis, E.** Some questions about questions and where is the coda /s/. *Presented at PhlegMe*. Hosted via Zoom. Bloomington, IN. Spring 2022.
- Arróniz, S., and Willis, E.** How to resolve the question? Dialectal variation of utterance types in Andalusian and Puerto Rican Spanish. *New Waves of Analyzing Variation 50*. Hosted by Stanford University. San José, CA. October 2022.
- 2021** **Arróniz, S.** Computer-Assisted Language Learning: Testing Morphological Structures in L2 Spanish. *13th Annual Graduate Portuguese and Hispanic Symposium*. Hosted via Zoom. Georgetown, DC. February 2021.
- Arróniz, S. and Restrepo, F.** Text Classification for L2 Spanish Compositions. *18th Diálogos Graduate Student Conference*. Bloomington, IN. February 2021.
- Arróniz, S., & Amaral, P.** On prosody and constructions: A phonological description of the Spanish reduplicative-topic construction. Poster presentation at *Hispanic Linguistics Symposium*. Hosted via Zoom. Wake Forest University, NC. October 2021.
- 2020** **Arróniz, S., Hanson, S. and Lurito, A.** Perception of Intonation in Peninsular Spanish: a pilot study. *Project proposal presented at PhlegMe*. Hosted via Zoom. Bloomington, IN. October 2020
- 2018** **Arróniz, S. and Coulter-Kern, M.** Fortición de la consonante palatal sonora: Un estudio explotatorio. *15th Diálogos Graduate Student Conference*. Bloomington, IN. March 2018.
- Arróniz, S.** Africación de los grupos /st/, /kt/ y /pt/: Una evolución de la post-aspiración en Andalucía. *15th Diálogos Graduate Student Conference*. Bloomington, IN. March 2018.
- Arróniz, S.** Estrategias de descortesía en el aula de español como L2. *II Congreso internacional del español hablado* Valencia, Spain. October 2018.
- 2017** **Arróniz, S.** Giving response to gratitude expressions in bilingual contexts: A contrastive analysis between American English and Spanish. *14th Diálogos Graduate Student Conference*. Bloomington, IN. March 2017
- INVITED TALKS**
- 2024** **Arróniz, S.** The Nasal Consonant System in Spanish: Theory and Acoustic Analysis. *Invited Lecture and practical session in the Hispanic Phonology course offered by Dr. Willis at the Department of Spanish and Portuguese, Indiana University - Bloomington*. Invited Talk. October 24th., 2024.
- Arróniz, S.** Las hablas andaluzas. *Invited Lecture and Q&A in the Hispanic Dialectology course offered by Dr. Restrepo-Ramos at the Department of World Languages and Cultures, Minnesota State University, Mankato*. Invited Talk. February 20th., 2024.
- 2023** **Arróniz, S.** Sounds from the South: Fricativization of /b d g/ in Western Andalusian Spanish. *Brown Bag Series at the Department of Spanish and Portuguese at Indiana University*. Invited Talk. November 17th., 2023.

Arróniz, S. Being Productive: Writing/Editing. *Professionalization Workshop Series at the Department of Spanish and Portuguese at Indiana University*. Invited Talk. November 3rd., 2023.

2022

Arróniz, S. What to Expect from MA/PhD Exams and Oral Defenses. *Professionalization Workshop Series at the Department of Spanish and Portuguese at Indiana University*. Invited Talk. December 2nd., 2022.

Arróniz, S. Academic Writing as you Finish the Semester. *Professionalization Workshop Series at the Department of Spanish and Portuguese at Indiana University*. Invited Talk. November 4th., 2022.

2021

Arróniz, S. Implementing Machine Learning techniques for the analysis of language. *Two sessions as part of the course on NLP for Spanish offered by Prof. Restrepo-Ramos at the Department of Spanish and Portuguese Studies at University of Florida*. Invited Talk. Hosted via Zoom. July 27th. and 29th., 2021.

Arróniz, S. How to use Qualtrics surveys for linguistic data collection. *Oral presentation as part of the course on Laboratory Phonology offered by Prof. Willis at the Department of Spanish and Portuguese at Indiana University*. Invited Talk. October 21st., 2021.

Arróniz, S. Using Qualtrics surveys to practice the International Phonetic Alphabet Chart and Transcriptions in the Spanish L2 classroom. *Active Learning Fair at the Department of Spanish and Portuguese at Indiana University*. Invited Talk. December 1st., 2021.

EXPERIENCE

Associate Instructor - Department of Spanish & Portuguese

Indiana University (Bloomington, IN)

2016 - 2018; 2019 - Present

Teaching assignments:

- HISP S-150: Elementary Spanish II (Fall 2016)
- HISP S-200: Second-year Spanish I (Fall 2017; Spring 2018)
- HISP S-250: Second-year Spanish II (Spring 2017; Fall 2019)
- HISP S-280: Spanish Grammar in Context (Spring 2020)
- HISP S-281: Spanish Grammar in Context for Heritage Speakers (Spring 2022)
- HISP S-308: Composition and Conversation in Spanish (Fall 2022, Spring 2023)
- HISP S-315: Spanish in the Business World (Fall 2021, Spring 2024)
- HISP S-317: Spanish Conversation and Diction-Service Learning in the Dominican Republic (Summer 2023)
- HISP S-326: Introduction to Hispanic Linguistics (Fall 2020; Spring 2021)

IUHPFL Language Instructor

IU Honors Program in Foreign Languages

Summer 2022

Financial Coordinator, Linguistics Instructor. León, Spain.

Research Assistant - Department of Spanish & Portuguese

Prof. Erik Willis (Indiana University)

Summer 2022

Different tasks related to the phonetic analysis of different aspects of Spanish.

Online Course Translator

Eppley Institute

Summer 2021

Translation into Spanish of the different modules that constitute the course for playground maintenance in the State of Indiana offered by the Eppley Institute for Parks and Public Lands.

Research Assistant - Department of Spanish & Portuguese

Prof. Erik Willis (Indiana University)

Summer 2020

Different tasks related to the phonetic analysis of different aspects of Spanish.

English Language Instructor

Kids&Joy Language School (Morón de la Frontera, Spain)

2018 - 2019

Teaching assignments (CEFR):

- A1/A2: Elementary English for children (2 sections)
- B1: Low Intermediate English for teenagers (3 sections)
- B1: Low Intermediate English for adults (4 sections)
- B2: Upper Intermediate English for teenagers (2 sections)

IUHPFL Language Instructor

IU Honors Program in Foreign Languages

Summer 2018

Public Relations Coordinator, Literature Instructor. León, Spain.

Internship at the Office of International Services

University of Seville (Seville, Spain)

2015 - 2016

Tasks included administrative work, attention to international students, email management and technical support.

Internship at the Spanish Association for the Effects of Cancer Treatment

AEETC (Seville, Spain)

2014 - 2015

Tasks included the production and preparation of adapted materials for oncological children, as well as the development of a predictive text tool directed to those students in the scope of secondary education.

AWARDS**COAS Dissertation Completion Fellowship**

Indiana University, Bloomington (2024-2025)

Awarded by the College of Arts and Sciences to help complete doctoral degrees in a timely manner.

Hadassah R. Weiner Pre-Dissertation Travel Grant

Indiana University, Bloomington (2024)

MIND (Motivación, Inspiración, Dedicación) Award for Impactful Teaching - Sigma Delta Pi

Indiana University, Bloomington (2023)

Outstanding Associate Instructor Teaching Award

Indiana University, Bloomington (2023)

Awarded by the Department of Spanish and Portuguese for outstanding teaching.

Agapito Rey - Departmental Travel Award

Indiana University, Bloomington (2022)

Awarded to attend *NWAV50* conference.

Scholarship - Ministerio de Educación

Gobierno de España, Spain (2011-2015)

Awarded to study an undergraduate degree.

**CAMPUS &
COMMUNITY
SERVICE**

Spanish Phonetics Working Group

Indiana University, Bloomington (2022-2024)

Founder and Organizer

La Gaceta Internacional

Indiana University, Bloomington (2022)

Editorial Committee

Graduate Student Advisory Committee (GSAC)

Indiana University, Bloomington (2020-2021)

Co-chair

18th Diálogos Graduate Student Conference

Indiana University, Bloomington (February 26-27, 2021)

Conference organization

17th Diálogos Graduate Student Conference

Indiana University, Bloomington (February 28-29, 2020)

Panel moderator

**SERVICE TO
THE
PROFESSION**

24 Hispanic Linguistics Symposium

Omaha, Nebraska

Manuscript reviewer (2024)

14th Conference Recent Advances in Natural Language Processing

Varna, Bulgaria

Manuscript reviewer (2023)

Enciclopedia Concisa de los Dialectos del Español

Edited by Manuel Díaz-Campos and Juan Manuel Hernández-Campoy, London: Wiley-

Blackwell Bloomington, Indiana

Chapter reviewer (2023)

The 16th Linguistic Annotation Workshop

Co-located with LREC, Marseille, France

Program Committee Member/Manuscript reviewer (2022)

The Handbook of Usage-Based Linguistics

Edited by Manuel Díaz-Campos and Sonia Balasch

Chapter reviewer (2022)

Coyote Papers

Department of Linguistics, *The University of Arizona*, Tucson

Manuscript reviewer - 2022

Congreso Retorno al Español del Caribe REALEC 2020

Hosted via Zoom. Pontificia Universidad Católica Madre y Maestra, Santiago, Domini-

can Republic
Co-host and technical support - 2020

IULC Working Papers in Linguistics

Indiana University, Bloomington
Manuscript reviewer - 2019, 2020

3rd International Conference of the American Pragmatics Association

Indiana University, Bloomington (November 4-6, 2016)
Technical and organizational support

**LANGUAGE
EXPERIENCE**

Spanish: Native/Linguistic knowledge
English: Near-native/Linguistic knowledge
Portuguese: Intermediate/Linguistic knowledge
Catalan: Beginner
French: Beginner
German: Beginner
Italian: Beginner
Japanese: Beginner
Imperial Old Tibetan: Linguistic knowledge/Translation
Latin: Linguistic knowledge/Translation
Ancient Greek: Linguistic knowledge/Translation

**COMPUTER
SKILLS**

Programming Languages: Python, R, L^AT_EX, SQL, NoSQL
Operating Systems: Unix, Linux, macOS, Windows
Data Analysis: Praat, AntConc, RStudio, Qualtrics, phonic.ai, scikit-learn, Tensor-Flow, Keras, flair, PyTorch

PROFESSIONALIZATION

- | | |
|-------------|---|
| 2024 | Developing Assignments Assessment Strategies for AI/Generative AI. Center for Teaching and Learning.
Indiana University - Bloomington. |
| 2023 | ChatGPT and AI in Teaching and Learning: Opportunities and Challenges. Center for Teaching and Learning.
IUPUI. |
| 2022 | Introduction to High Performance Computing (HPC). University Information Technology Services - IT Training.
Indiana University Bloomington. |
| 2021 | Implementing Peer Review Practices. Center for Innovative Teaching and Learning.
Indiana University Bloomington. |

- 2020**
- Writing a Diversity Statement.** Center for Innovative Teaching and Learning.
Indiana University Bloomington.
- Creating a Teaching Portfolio.** Center for Innovative Teaching and Learning.
Indiana University Bloomington.
- Professionalization Workshop Series.** Department of Spanish & Portuguese.
Indiana University Bloomington.
- 2014**
- Formación del Proyecto Sinergia.** Encouraging multidisciplinary cooperative work
and the spirit of entrepreneurship.
University of Seville.