# John (Jack) Duff

# jduff@lst.uni-saarland.de

Saarland University Language Science & Technology Campus C7 4, Room 3.05 66123 Saarbrücken / Germany

## MAJOR ACADEMIC EMPLOYMENT

# **Postdoctoral Researcher, Saarland University**

January 2024 - present

Department of Language Science & Technology

Project: Individualized Interaction in Discourse (ERC #948878)

Supervisor: Vera Demberg

# **EDUCATION**

**PhD in Linguistics**, University of California, Santa Cruz

December 2023

Dissertation: On the timing of decisions about meaning during

incremental comprehension

Committee: Pranav Anand and Amanda Rysling (co-chairs),

Matthew Wagers, and Jesse A. Harris

**BA in Linguistics**, University of Massachusetts, Amherst

May 2018

Honors thesis: Somebody's fool: Theory of mind and

the interpretation of epithets

Committee: Lyn Frazier & Charles Clifton, Jr.

(additional BAs in Linguistics & Psychology and Classical Language)

## **RESEARCH PUBLICATION & PRESENTATION**

## **JOURNAL ARTICLES**

John Duff, Pranav Anand, Adrian Brasoveanu, and Amanda Rysling. 2023. Pragmatic representations and online comprehension: Lessons from direct discourse and causal adjuncts. *Glossa Psycholinguistics* 2(1). DOI: <u>10.5070/G6011198</u>.

Fe Silva-Robles, Felipe H. Lopez, John Duff, and Carolyn Anderson. 2022. Eliciting associated motion constructions in two Zapotec languages. *Semantic Fieldwork Methods* 4(3): 1-51. (Link)

Lyn Frazier and John Duff. 2019. Processing ellipsis: The circumstances of repair. *Glossa* 4(1): 78. DOI: 10.5334/gjgl.728.

Lyn Frazier, Charles Clifton Jr., Stephanie Rich, and John Duff. 2018. Anticipating negation: The dos and don'ts of Neg Raising. *Syntax* 21(2): 160-194. DOI: 10.1111/synt.12151.

Alice C. Harris and John Duff. 2018. Relation of agreement clitics to verb stems in Caucasian Albanian. *International Journal of Diachronic Linguistics and Linguistic Reconstruction* 15: 45-69. (PDF)

## **PROCEEDINGS PAPERS & WORKING PAPERS**

John Duff, Ivy Sichel, and Maziar Toosarvandani. 2022. Redundancy and restriction in the derivation of relative clauses. In Lalitha Balachandran & John Duff (eds.) *Syntax & Semantics at Santa Cruz* Vol. 5: 35-58. (<u>Link</u>)

John Duff & Lalitha Balachandran. 2022. Participants seek shared outlooks in non-canonical disagreements: Evidence from a corpus of dyadic conversation in English. In *Proceedings of SemDial 26 (DubDial)*. (Link)

John Duff. Forthcoming. The structure of events and arguments in associated motion. In *Proceedings of WSCLA 25.* (Pre-print - 9/15/21)

John Duff. 2021. A causal decomposition for associated motion events in Santiago Laxopa Zapotec. In Robert Autry et al. (eds.) *Proceedings of WCCFL 39*: 146-155. (<u>Link</u>)

John Duff. 2019. The locus of commitment: Flipping judges in a commitment-based discourse model. In Merijn Beeksma & Matteo Manighetti (eds.), *Proceedings of the ESSLLI 2019 Student Session*. (PDF)

#### **EDITED VOLUMES**

Lalitha Balachandran & John Duff (eds.) 2022. *Syntax & Semantics at Santa Cruz* Vol. 5. Linguistics Research Center, UC Santa Cruz. (<u>Link</u>)

# **PRESENTATIONS & POSTERS** (\* = (co-) first author)

#### PEER-REVIEWED PRESENTATIONS

\*Cross-linguistic variation in structural prediction as learned behavior. Accepted as a talk at Rational Approaches in Language Science (RAILS) 2, February 2025, Saarland University. (with Delaney Gomez-Jackson, Fe Silva Robles, Maziar Toosarvandani, and Matthew Wagers)

Listeners adapt to speakers' pragmatic competence. Accepted as a poster at Rational Approaches in Language Science (RAILS) 2, February 2025, Saarland University. (with Kata Naszadi, Alexandra Mayn, and Vera Demberg)

- \*Reanalysis in discourse comprehension: Evidence from reading times. Accepted as a poster at the Amsterdam Colloquium, December 2024. (with Daniel Altshuler)
- \*The role of reinforcement learning in pragmatic reasoning tasks: Modeling individual differences in ACT-R. Talk at XPrag.it 5, Venice, September 2024. (with Alexandra Mayn and Vera Demberg)
- \*Not as rational as RSA predicts: Failure to reason about alternative messages. Poster at XPrag.it 5, Venice, September 2024. (with Alexandra Mayn, Nataliia Bila, and Vera Demberg)
- \*Effects of foil processing, decision-making, and initial attention in the Maze task. Poster at AMLaP 30, Edinburgh, September 2024. (with Pranav Anand and Amanda Rysling)
- \*Modeling individual differences in a pragmatic reference game as a consequence of variable disengagement from unsuccessful strategies. Talk in the "Computational Psycholinguistics" symposium at MathPsych/ICCM 2024, Tilburg, July 2024. (with Alexandra Mayn and Vera Demberg)
- \*Delayed structural prediction for relative clauses in Santiago Laxopa Zapotec, a language with robust resumptive pronouns. Talk at the Conference on Human Sentence Processing (HSP) 37, UMich, May 2024. (with Delaney Gomez-Jackson, Fe Silva Robles, Maziar Toosarvandani, and Matthew Wagers)
- \*Different structural boundaries have different effects on dependency resolution. Poster at the Conference on Human Sentence Processing (HSP) 37, UMich, May 2024. (with Lalitha Balachandran, Pranav Anand, and Amanda Rysling)
- \*Incremental computation of scalar implicatures in the Maze task. Talk at XPrag X, Paris, September 2023. (with Pranav Anand and Amanda Rysling)
- \*No cost to cancelling causal inferences in the comprehension of short English narratives. Poster at AMLaP 29, BCBL, September 2023. (with Pranav Anand and Amanda Rysling)

- \*Partition vs. compression: Memory domains and the processing of appositives. Poster at AMLaP 28, University of York, September 2022. (with Lalitha Balachandran, Pranav Anand, and Amanda Rysling)
- \*In search of pragmatic discounting: Lessons from direct discourse and causal adjuncts. Talk at Processing Meets Semantics (PROMS), Utrecht, September 2022. (with Pranav Anand, Adrian Brasoveanu, and Amanda Rysling)
- \*Participants seek shared outlooks in non-canonical disagreements: Evidence from a corpus of dyadic conversation in English. Talk at SemDial, Technological University Dublin, August 2022. (with Lalitha Balachandran)
- \*Task effects on the processing of predicate ambiguity: Distributivity in the Maze. Short talk at Experiments in Linguistic Meaning (ELM) 2, UPenn, May 2022. (with Adrian Brasoveanu and Amanda Rysling)
- \*Use/Mention ambiguities in comprehension: Evidence from agreement attraction. Short talk at the Conference on Human Sentence Processing (HSP) 35, UC Santa Cruz, March 2022. (with Matthew Wagers)
- "It's alive!": Animacy-based structural expectations rapidly update with context. Short talk at the Conference on Human Sentence Processing (HSP) 35, UC Santa Cruz, March 2022. (with Stephanie Rich, Lalitha Balachandran, Matthew Kogan, Nicholas Van Handel, Maya Wax Cavallaro, and Matthew Wagers)
- \*Tonal patterns and their restrictions in Santiago Laxopa Zapotec. Talk at the Society for the Study of the Indigenous Languages of the Americas (SSILA) Annual Meeting, January 2022. (with Mykel L. Brinkerhoff and Maya Wax Cavallaro)
- \*Associated motion and the structure of the verb in Santiago Laxopa Zapotec. Talk at the Workshop on Structure and Constituency in Languages of the Americas (WSCLA) 25, UC San Diego, May 2021.
- \*Downstep in Santiago Laxopa Zapotec and the prosodic typology of VSO languages. Talk at the Manchester Phonology Meeting (mfm) 28, May 2021. (with Mykel L. Brinkerhoff and Maya Wax Cavallaro)
- \*A mighty Maze! Revisiting strategic underspecification using the Maze task. Talk at California Meeting on Psycholinguistics (CAMP) 4, UC Irvine, May 2021. (with Shayne Sloggett, Nicholas Van Handel, Kelsey Sasaki, Stephanie Rich, Wesley Orth, Pranav Anand, Adrian Brasoveanu and Amanda Rysling)
- \*Composing associated motion in Santiago Laxopa Zapotec. Talk at the West Coast Conference on Formal Linguistics (WCCFL) 39, U of Arizona, April 2021. (<u>Handout</u>)

- \*Task influences on lexical underspecification: Insights from the Maze and SPR. Short talk at CUNY Conference on Human Sentence Processing, UPenn, March 2021. (with Adrian Brasoveanu and Amanda Rysling)
- \*Semantic commitment and underspecification in the Maze. Poster at AMLaP, University of Potsdam, September 2020. (with Adrian Brasoveanu and Amanda Rysling)
- \*The processing of direct discourse: When a subordinate speech act sticks around. Poster at CUNY Conference on Human Sentence Processing, UMass Amherst, March 2020. (with Pranav Anand, Adrian Brasoveanu, and Amanda Rysling)
- "Ambiguous" isn't "underspecified": Evidence from the Maze task. Poster at CUNY Conference on Human Sentence Processing, UMass Amherst, March 2020. (with Shayne Sloggett, Nicholas Van Handel, Kelsey Sasaki, Stephanie Rich, Wesley Orth, Pranav Anand, and Amanda Rysling)
- \*The locus of commitment: Flipping judges in a commitment-based discourse model. Poster at ESSLLI 31 Student Session, University of Latvia, August 2019.
- \*Individual differences and the relationship between attitude predicates and perspective. Talk at California Meeting on Psycholinguistics (CAMP) 2, University of Southern California, December 2018.
- \*Says who?: The influence of speech and mental predicates on epithet interpretation. Poster at CUNY Conference on Human Sentence Processing, UC Davis, April 2018.
- \*Evidence for multiple memory representations from discourse anaphora and ellipsis. Poster at CUNY Conference on Human Sentence Processing, UC Davis, April 2018. (with Lyn Frazier)
- \*Udi and the location of Caucasian Albanian agreement clitics. Poster at Linguistic Society of America (LSA) Annual Meeting, Salt Lake City, January 2018. (with Alice C. Harris)
- \*Anticipating negation: Experimental evidence for a semantic account of Neg Raising. Poster at CUNY Conference on Human Sentence Processing, MIT, March 2017. (with Lyn Frazier, Charles Clifton Jr., and Stephanie Rich)

#### **OTHER PRESENTATIONS**

\*Semantic garden paths and the timing of comprehension decisions. Invited colloquium, Oxford University Faculty of Linguistics, Philology and Phonetics, May 2024.

\*Coherence inferences are made quickly but tentatively. Invited guest lecture for seminar on discourse processing (Kelsey Sasaki & Daniel Altshuler), Oxford University, May 2024.

Various contributions to Guillem Belmar, Mykel Loren Brinkerhoff, Eric W. Campbell, and Maya Wax Cavallaro (orgs.) *Engaging the community: Using field methods classes for community outreach*, organized session at the Society for the Study of the Indigenous Languages of the Americas (SSILA) Annual Meeting, January 2023.

- Developing computer games in field methods classes: A tool for language teaching and revitalization. (Talk) (with Giorgia Troiani, Jeremías Salazar, Andrew Hedding, Matthew Kogan, Natalia Gracida Cruz, Fe Silva-Robles, and Mykel Lorne Brinkerhoff)
- Implementing Game of Tones. (Tutorial) (with Andrew Hedding, Matthew Kogan, and Mykel Lorne Brinkerhoff)
- Story books as outcomes from Field Methods classes: P'urhépecha, Sà'án Sàvĭ ñà
  Yukúnanĭ and Santiago Laxopa Zapotec. (Talk) (with Jeremías Salazar, Martín Gabriel
  Ruiz, Eric W. Campbell, Guillem Belmar, Maya Wax Cavallaro, Raul Diaz Robles,
  Delaney Gomez-Jackson, Claire Miller Willahan, and Mykel Lorne Brinkerhoff)

\*The causal properties of associated motion. Talk at the Converging On Causal Ontology Analyses (COCOA) workshop, CNRS (OASIS), September 2021.

\*To flip a judge: Predicates of personal taste in a commitment-based discourse model. Invited talk at UC Berkeley's Syntax & Semantics Circle, October 2019 & Talk at California Universities Semantics & Pragmatics (CUSP) 12, University of Southern California, November 2019.

<sup>\*</sup>Deriving "restrictive" interpretations for clarificatory nominal appositives. Talk at California Universities Semantics & Pragmatics (CUSP) 13, UCLA, May 2022.

# TEACHING \_\_\_\_\_

#### SAARLAND

Seminar: Pragmatic computation in real-time sentence processing Summer 2024

Seminar: Cognitive modeling of human language understanding Winter 2024

(co-taught with Alexandra Mayn)

Seminar: Language model embeddings and the human lexicon Summer 2025

UC SANTA CRUZ (\* = online)

Psycholinguistics I Instructor: Fall 2022, Summer 2023\*

**Introduction to Linguistics**TA, Fall 2020\* for Adrian Brasoveanu

Invented Languages TA, Spring 2020\*, Spring 2021\* for Pranav Anand

Reader, Summer 2020\* for Pranav Anand

TA, Winter 2022 for Pranav Anand

Language & Mind TA, Fall 2021\* for Jake Vincent

**Psycholinguistics & Linguistic Theory**TA, Winter 2021\* for Matthew Wagers

Semantics 1 TA, Fall 2019 for Thomas Roberts

Semantics 2 TA, Winter 2020 for Jess Law

Syntax 1 TA, Winter 2023 for Ivy Sichel

**Linguistic Models of Syntax and Semantics** 

for Computer Scientists

Computational Methods for Linguists

Tutor, Winter 2022\* for Kelsey Kraus

## **SUPERVISION AND MENTORSHIP**

## SAARLAND

Tymur Mykhalievskyi (BA thesis), Understanding pragmatic ongoing

Maryam Meghdadi Esfahani (MA research assistant), Integrating word embeddings to approximate lexical co-activation in ACT-R

reasoning through eye movement patterns in reference games

ongoing

#### **UC SANTA CRUZ**

**Rysling Lab** 2022–2023

*Undergraduate Mentees*: Sebastian Bissiri, Pamela Casipe, Jason Kushner, Kasey La, Kavi Mookherjee Amodt

▶ Running participants in eye-tracking while reading experiments.

# Science Internship Program

2020, 2021

High School Student Mentees: Robert Liu, Stephanie Palomares, Vindhya Shigehalli, Jacqueline Wen, Naomi Wong

- ▶ Prepared, annotated, and analyzed a corpus of response particles in naturalistic conversation.
- Generated a submission to the Columbia Junior Science Journal.

Conversation Lab 2020–2021

Undergraduate Mentees: Dasha Komissarchik, David Tuffs

▶ Collected a corpus of naturalistic conversation.

# Honig Undergraduate Research Assistant Program

2020

Undergraduate Mentee: Jennifer Wheelock

▶ Designed procedure for eliciting naturalistic subjective conversation.

# OTHER RESEARCH EMPLOYMENT \_\_\_\_\_

#### **Graduate Research Assistant**

March - September 2023

UC Santa Cruz, NSF Grant BCS-2019804

Pls: Maziar Toosarvandani, Matt Wagers

- ▶ Analyzing and reporting visual-world eye-tracking data collected in 2022.
- ▶ Designing, planning, and developing stimuli for a field judgment experiment on inter-speaker variation in Santiago Laxopa Zapotec.
- ▶ Two weeks in the field in Santiago Laxopa, Oaxaca running the experiment, conducting sociolinguistic interviews, and continuing to build relationships.

#### **Graduate Research Assistant**

March - September 2022

UC Santa Cruz, NSF Grant BCS-2019804

Pls: Maziar Toosarvandani, Matt Wagers

- ▶ Designing, planning, and developing stimuli for a field eye-tracking experiment on Santiago Laxopa Zapotec, and pedagogical materials for reading/writing workshops.
- ▶ Two weeks in the field in Santiago Laxopa, Oaxaca running the experiment, conducting sociolinguistic interviews, and continuing to build relationships.

#### **Graduate Research Assistant**

June - September 2022

UC Santa Cruz

PI: Grant McGuire

▶ Developing a free sorting experiment on voice similarity in jsPsych.

# **Web Development Consultant**

October 2021 - January 2022

UC Santa Cruz, Chamorro Dictionary Revision Project

Pls: Sandy Chung

▶ Developed resources for English-to-Chamorro reverse queries using Perl.

## **Graduate Research Assistant**

June - September 2021

UC Santa Cruz, NSF Grant BCS-2019804

Pls: Maziar Toosarvandani, Ivy Sichel

▶ Planned, conducted, and analyzed weekly elicitations on resumptive pronouns and the structure of the relative clause in Santiago Laxopa Zapotec.

#### **Graduate Research Assistant**

June - September 2019

UC Santa Cruz

Pls: Pranav Anand, Maziar Toosarvandani

▶ Developed neo4j backend for Códice fieldwork software.

# **Graduate Research Assistant**

June - September 2019

UC Santa Cruz

Pls: Pranav Anand, Jim McCloskey

▶ Trained undergraduates in the development of web-based experiments.

#### **Research Assistant**

January - September 2018

UMass Amherst, NSF Grant BCS-1729256

Pls: Alice Harris, Arthur Samuel

- ▶ Traveled with Harris to Azerbaijan for two weeks of field work on Udi.
- Prepared stimuli and conducted analysis for field experiments.

# Intern, Research Assistant

June - August 2017

Center for the Study of Language and Information, Stanford University

Pls: Katherine Hilton, Rob Podesva

▶ Developed an experiment on visual attention attribution over multiple speakers.

#### **Research Assistant**

September 2016 - May 2018

**UMass Amherst** 

Pls: Lyn Frazier and Charles Clifton, Jr.

#### **Publications Assistant**

June - August 2016

Center for Hellenic Studies, Harvard University

Used TEI-compliant XML to encode texts for the Open Greek and Latin Initiative.

#### **Software Developer (Volunteer)**

June - August 2016

Classical Language ToolKit (CLTK)

▶ Developed an IPA transcription engine and related tools for the automatic metrical parsing of digital texts in Ancient Greek and Classical Latin orthography.

#### **Research Assistant**

September 2015 - December 2017

UMass Amherst, Phonetics Lab PI: John Kingston

# **Summer Schools and Other Education:**

European Summer School in Logic, Language and Information (ESSLLI), Riga	August 2019
Russian Language (A1), Durbe Academy, Riga	July 2019
Eastern Generative Grammar (EGG), Brno	August 2015
Leiden University Summer School in Languages and Linguistics	July 2015

# AWARDS AND HONORS

#### Grants

John Fell Fund Grant (University of Oxford)	March 2024
Measuring garden-path costs in discourse	(£3720)
(with Daniel Altshuler)	
Jacobs Research Funds Group Grant	April 2021
Stress, tone, and phonation in Santiago Laxopa Zapotec	(\$4999)
(with Mykel L. Brinkerhoff and Maya Wax Cavallaro)	

# Other

Dissertation Fellowship, UC Santa Cruz	September 2023 - December 2023
Regents Fellowship, UC Santa Cruz	September 2018 - June 2019
Marcus L. Urann Fellowship, Phi Kappa Phi	September 2018 - June 2019
William M. Bulger Award, Classics, UMass Amherst	December 2017
UMass Amherst Honors Research Grant	September 2017
William F. Field Alumni Scholarship, UMass Amherst	April 2017
Rising Researcher Award, UMass Amherst	November 2016
UMass Amherst National Merit Scholar	June 2014 - May 2018

Inducted Member of Phi Beta Kappa, Phi Kappa Phi, and Eta Sigma Phi

# **PROFESSIONAL SERVICE**

# **Journal Reviewing**

Language	2024
Acta Psychologica	2023-2024

# **Conference Organization**

West Coast Conference on Formal Linguistics (WCCFL)	2023
Conference on Human Sentence Processing (HSP)	2022
California Annual Meeting on Psycholinguistics (CAMP)	2019

# **Conference Reviewing**

CogSci	2017-2024
Conference on Human Sentence Processing (HSP)	2024
Architectures & Mechanisms in Language Processing (AMLaP)	2024
Society for the Study of the Indigenous Langs. of the Americas (SSILA)	2024
California Annual Meeting on Psycholinguistics (CAMP)	2018-2023
ESSLLI Student Session	2022

## **Public Service**

Language Outreach Volunteer, Nido de Lenguas	Sep 2018 - Dec 2023
Mentor, Santa Cruz Co. College Essay Application Workshop	Oct 2020

# **Departmental Service, UCSC**

Coordinator, Syntax & Semantics Circle (S-Circle)	Sep 2020 - Jun 2022
Coordinator, Syntax, Semantics, and Language Processing Lab (s/lab)	Sep 2019 - Dec 2020
Computer Czar & Editor of the WHASC Newsletter	Sep 2019 - Jun 2020
Entertainment Subcommittee Chair, Events Committee	Sep 2019 - Jun 2020

## **Other Activities**

Transcribed interviews for a forthcoming history of formal semantics by Barbara Partee.

## **LANGUAGES**

Native: English

Intermediate: Spanish, Classical Latin, Ancient Greek

Beginner: German

Research: Santiago Laxopa Zapotec,

Caucasian Albanian (Old Udi), Udi

#### **TECHNICAL SKILLS**

R, Ibex, OpenSesame, ACT-R, Python, JS, Perl, Praat, LaTeX, Git, SIL Toolbox, brat, neo4j, PyTorch

