

## Society for Computation in Linguistics, 2024

Dates: Thursday, June 27 - Saturday, June 29, 2024

Venue: Social & Behavioral Sciences Gateway (SBSG), UC Irvine

214 Pereira Dr, Irvine, CA 92617 ([map](#))

All **talks** will take place at SBSG 1517; all **posters** will take place at SBSG 1321.

The link to the conference on zoom is sent to attendees through their email used for registration.

Thursday 6/27	
8:00am-8:45am	<b>Registration, Breakfast</b>
8:45am-9:00am	<b>Opening Remarks</b>
9:00am-10:15am	<b>Talk Session I: Learning</b> (Chair: Richard Futrell)
	Boram Kim, Joonsuk Kang <i>Pragmatics-utilizing distributional learner (PUDL) without deterministic hypothesis space</i>
	Sneha Ray Barman, Shakuntala Mahanta <i>Modeling regressive vowel harmony from continuous speech stream</i>
	Hagyeong Shin, Sean Trott <i>Do language models capture implied discourse meanings?</i>
10:15am-10:45am	<b>Coffee Break</b>
10:45am-12:00pm	Avni Gulrajani, Jeffrey Lidz <i>Reassessing a model of syntactic island acquisition</i>
	Haiyin Yang <i>Native Language Identification Using Collocations as Features</i>
	Canaan Breiss, Alexis Ross, Amani Maina-Kilaas, Roger Levy, Jacob Andreas <i>Learning Phonotactics from Linguistic Informants</i>
12:00pm-1:15pm	<b>Lunch at <a href="#">UTC</a></b>
1:15pm-2:30pm	<b><a href="#">In-person at SBSG 1321 + Virtual Poster Session I</a> + Coffee Break</b>
2:30pm-3:45pm	<b>Talk Session II: Formal Grammars and Learning</b> (Chair: Connor Mayer)
	Sarah Ruth Brogden Payne <i>A Generalized Algorithm for Learning Positive and Negative Grammars with Unconventional String Models</i>
	Jacob Johnson, Aniello De Santo <i>Online Learning of ITSL Grammars</i>
	Rachel Meyer, Sophia Vellozzi, Ratrete Wayland, Kevin Tang, Rahul Sengupta <i>Measuring Second Language Acquisition of Spanish Lenition</i>
3:50pm-4:50pm	<b>Invited Talk: Jacob Andreas</b> ( <a href="#">abstract</a> )
5:30pm-8:00pm	<b>Conference Dinner at <a href="#">Eureka!</a></b>



<b>Friday 6/28</b>	
8:00am-9:00am	<b>Breakfast</b>
9:00am-10:15am	<p><b>Talk Session III: Information Theory</b> (Chair: Noga Zaslavsky)</p> <p>Mario Giulianelli, Sarenne Wallbridge, Raquel Fernández <i>Information Value: Measuring Utterance Predictability as Distance from Plausible Alternatives</i></p> <p>Athul Paul Jacob, Gabriele Farina, Jacob Andreas <i>Regularized Conventions: Equilibrium Computation as a Model of Pragmatic Reasoning</i></p> <p>Amanda Doucette, Ryan Cotterell, Morgan Sonderegger, Timothy O'Donnell <i>Correlation Does Not Imply Compensation: Complexity and Irregularity in the Lexicon</i></p>
10:15am-10:45am	<b>Coffee break</b>
10:45am-12:00pm	<a href="#">In-person Poster Session at SBSG 1321 + Virtual Poster Session II</a>
12:00pm-1:15pm	<b>Lunch at <a href="#">UTC</a></b>
1:15pm-2:30pm	<p><b>Talk Session III (cont'd): Information Theory</b> (Chair: Nathaniel Imel)</p> <p>Richard Futrell <i>Natural-Language-Like Systematicity from a Constraint on Excess Entropy</i></p> <p>Eleonora Gualdoni, Mycal Tucker, Roger Levy, Noga Zaslavsky <i>Bridging semantics and pragmatics in information-theoretic emergent communication</i></p> <p>Sidharth Ranjan, Sumeet Agarwal, Rajakrishnan Rajkumar <i>Interference Predicts Locality: Evidence from an SOV language</i></p>
2:30pm-3:00pm	<b>Coffee break</b>
3:00pm-3:50pm	<p><b>Talk Session IV: Formal Language Theory</b> (Chair: Aniello de Santo)</p> <p>Jonathan Rawski, Amy Li <i>Regular Reduplication Across Modalities</i></p> <p>Thomas Graf <i>Morphologically simplex D-quantifiers are strictly 2-local</i></p>
3:50pm-4:50pm	<p><b>Invited Talk: Jennifer Culbertson</b> (Chair: Noga Zaslavsky) <i>Building experimentally informed theories of typology</i> [<a href="#">abstract</a>]</p>
4:50pm-5:30pm	<b>Mentorship program</b>



Saturday 6/29	
8:00am-9:00am	<b>Breakfast</b>
9:00am-10:40am	<b>Talk Session V: Psycholinguistics</b> (Chair: Jiaxuan Li)
	Yanting Li, Gregory Scontras, Richard Futrell <i>On the communicative utility of code-switching</i>
	Sathvik Nair, Philip Resnik <i>Words, Subwords, and Morphemes: What Really Matters in the Surprisal-Reading Time Relationship?</i>
	Hailin Hao, Himanshu Yadav, Elsi Kaiser <i>Naturalistic Reading Time Data Support Information Locality</i>
	Satoru Ozaki, Aniello De Santo, Tal Linzen, Brian Dillon <i>CCG parsing effort and surprisal jointly predict RT but underpredict garden-path effects</i>
10:40am-11:00am	<b>Coffee Break</b>
11:00am-12:00pm	<b>Invited Talk: Noah Goodman</b> (Chair: Richard Futrell) <i>How language works</i>
12:00pm-1:30pm	<b>Lunch at <a href="#">UTC</a></b>
1:30pm-2:30pm	Business Meeting (Social Sciences Plaza B, Room 2214)

**In-person + Virtual Poster Session I** (Thursday 6/27, 1:15pm-2:30pm) at SBSG 1321

In-person posters	Hana Hledíková <i>Investigating valency-changing prefixes in Czech and German using large syntactically annotated data</i>
	Josef Fruehwald, Christian Brickhouse <i>aligned-textgrid: Lightweight access to structured phonetic data</i>
	Ryan Ka Yau Lai <i>Why we need asymmetric measures to classify multi-word expressions: The case of Tibetan light verb constructions</i>
	Karl Mulligan, Kyle Rawlins <i>Identifying Questions Under Discussion in Naturalistic Discourse</i>
	Lei Liu <i>Psycholinguistic Adequacy of Left-corner Parsing for Minimalist Grammar</i>
	Lorenss Martinsons <i>Transformer Performance on Case in Balto-Slavic Languages</i>
Online posters	Yue Zou, Hao Lin [ <a href="#">zoom</a> ] <i>A multifactorial analysis on the Dative Alternation in Russian</i>



	<p>Timothee Mickus <a href="#">[zoom]</a> <i>Language Models and the Paradigmatic Axis</i></p>
	<p>Luise Häuser, Gerhard Jäger, Alexandros Stamatakis <a href="#">[zoom]</a>, passcode: 962898] <i>Computational Approaches for Integrating out Subjectivity in Cognate Synonym Selection</i> <a href="#">[poster]</a></p>
	<p>Arne Rubehn, Jessica Nieder, Johann-Mattis List <a href="#">[zoom]</a>, passcode: 411703] <i>A Dynamic Approach for the Generation of Feature Vectors from Phonetic Transcriptions in Cross-Linguistic Data Formats</i> <a href="#">[poster]</a></p>
	<p>Qing Yao, Simon Todd <a href="#">[zoom]</a> <i>BERT's Insights Into the English Dative and Genitive Alternations</i></p>

**In-person + Virtual Poster Session II** (Friday 6/28, 10:45am-12:00pm) at SBSG 1321

In-person posters	<p>Ryan Ka Yau Lai <i>Discontinuous constructions in spoken Chinese varieties: Extraction and contrastive covarying collexeme analysis</i></p>
	<p>Caleb Belth <i>Meaning-Informed Low-Resource Segmentation of Agglutinative Morphology</i></p>
	<p>Kenneth Hanson <i>Tiers, Paths, and Syntactic Locality: The View from Learning</i></p>
	<p>Damir Cavar, Zoran Tiganj, Ludovic Mompelat, Billy Dickson <i>Computing Ellipsis Constructions: Comparing Classical NLP and LLM Approaches</i></p>
	<p>Alan Zhou, Colin Wilson <i>Modeling morphosyntactic agreement as neural search: a case study of Hindi-Urdu</i></p>
	<p>Jane Li, Kyle Rawlins, Paul Smolensky <i>What representations do RNNs learn and use from morpho-phonological processes?: an exploration of PCA and PC neutralizations on Turkish vowel harmony</i></p>
	<p>Scott Nelson, Eric Bakovic <i>Underspecification without Underspecified Representations</i></p>
	<p>Fred Mailhot, Cassandra L Jacobs <i>Modeling exemplar production over human speech tokens with dynamic time warping and barycenter averaging</i></p>
	<p>Jiayi Lu, Jonathan Merchan, Lian Wang, Judith Degen <i>Can Syntactic Log-odds Ratio Predict Acceptability and Satiation?</i></p>
Online posters	<p>Zoey Liu, Haiyin Yang, Jarrod D. Cruz, Stefanie Wulff <a href="#">[zoom]</a> <i>Modeling the Dative Alternation in English Early Child Language</i></p>
	<p>Stefan L. Frank <a href="#">[zoom]</a> <i>Neural language model gradients predict event-related brain potentials</i></p>
	<p>Timothee Mickus <a href="#">[zoom]</a></p>



<p><i>Stranger than Paradigms: Word Embedding Benchmarks Don't Align With Morphology</i></p> <p>Meghna Hooda, Mudafia Zafar, Samar Husain [<a href="#">zoom</a>, password: 3Zky6U]  <i>Do speakers minimize dependency length during naturalistic dialogue?</i> [<a href="#">poster</a>]</p> <p>Dakotah Lambert, Jeffrey Heinz [<a href="#">zoom</a>]  <i>Algebraic Reanalysis of Phonological Processes Described as Output-Oriented</i></p> <p>Michał B. Paradowski, Piotr Bródka, Michał Czuba, Nicole Whitby [<a href="#">zoom</a>]  <i>Dynamic computational social network analysis of language learner interactions: Novel insights for study-abroad second language acquisition</i></p> <p>Giorgio Magri [<a href="#">zoom</a>, password: scil2024]  <i>How many maximum entropy grammars are predicted by a constraint set when we ignore small differences among grammars?</i></p> <p>Zhouyi Sun, Jonathan Rawski [<a href="#">zoom</a>]  <i>Tensor Product Representations of Regular Transformations</i></p> <p>Lindy Comstock, Brandon Soung, Priyanshu Sharma [<a href="#">zoom</a>]  <i>Sentiment Analysis of Russian Political Discourse: Does Translation Matter?</i></p>
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## Invited talks

### Jacob Andreas: Playing Language Games With and Like People

The last few years have seen a series of rapid developments at the intersection of machine learning and game theory. Today, systems that combine learned models of human behavior and game-theoretic decision-making techniques can compete with the best humans in games that involve bluffing, alliance-building, and long-term planning. Game-theoretic approaches have long been a staple in computational models of language change and pragmatic communication---what can this new generation of game theory techniques teach us about human language? I'll present recent work revisiting game-theoretic models of pragmatics, offering a new game-theoretic interpretation of the Rational Speech Acts model and related probabilistic models of language comprehension. I'll conclude by briefly discussing how these same techniques can be applied in NLP to improve the truthfulness and coherence of neural language models on question answering tasks. This is joint work with Athul Jacob, Yikang Shen and Gabriele Farina.

### Jennifer Culbertson: Building experimentally informed theories of typology

Human languages exhibit striking variation. At the same time, certain linguistic patterns crop up again and again, while others seem to be extremely rare. What these tantalising observations tell us about human language is one of the most contentious questions in linguistics. Do similarities between languages reflect accidents of history? A special capacity for language in humans? More general features of the human mind? Do they reflect hard-and-fast constraints on the space of possible languages? Or soft biases that influence learning and usage?



Traditionally, linguists have argued for one or another of these answers based on limited sources of evidence. For example, it is common to base claims about universality on small samples of languages, case studies of how a handful of languages change over time, or examples of how individual languages are learned. In this talk, I use two case studies to highlight how behavioral experiments, targeting diverse participant populations, can be used to bring crucial empirical evidence to bear on how language is shaped (or not!) by the human linguistic and cognitive system. In the first case study, I summarise a strand of research on the role of systematicity and conceptual knowledge in shaping cross-linguistic patterns of nominal word order. In the second, I describe recent experimental work on typological trends in personal pronoun systems. In each case, I discuss how this kind of evidence can be used to improve models and theories of linguistic typology.

