CoNLL 2025

# The 29th Conference on Computational Natural Language Learning (CoNLL 2025)

**Proceedings of the Conference** 

July 31 - August 1, 2025

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## Introduction

Welcome to CoNLL, the annual conference organized by the ACL Special Interest Group on Natural Language Learning (SIGNLL). As in previous years, CoNLL is a single-track conference with a focus on theoretically, cognitively and scientifically motivated approaches to computational linguistics, particularly exploring interactions between theoretical issues and computational modeling. This year, CoNLL is held alongside ACL 2025.

For our conference program, we received a total of 217 archival and 20 non-archival paper submissions, out of which we accepted 40 archival submissions (18%) and 6 non-archival submissions (30%). In addition to direct submissions, our program includes one presentation of a Findings paper accepted to the ACL main conference. Accepted papers are presented in two poster sessions and four oral sessions. In addition, the program includes a discussion session as well as two invited talks, by Raquel Fernández and Jean-Rémi King.

Our program committee consisted of 22 area chairs and 189 reviewers, whom we'd like to thank very much for providing constructive reviews and thoughtful recommendations. Special thanks go to our publication chairs, Emily Cheng and Selina Meyer, and publicity chairs, Snigdha Chaturvedi and Anvesh Rao Vijjini, for their crucial support. The SIGNLL board and last year's organizers provided numerous useful tips and important information. We are grateful for Google DeepMind's sponsoring of the Best Paper Award.

And, last but very much not least, a big thank you to the authors and the community, without whom this conference would not exist.

Gemma and Michael CoNLL 2025 conference co-chairs

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# **Table of Contents**

HKCanto-Eval: A Benchmark for Evaluating Cantonese Language Understanding and Cultural Comprehension in LLMs      Tsz Chung Cheng, Chung Shing Cheng, Chaak-ming Lau, Eugene Lam, Wong Chun Yat, Hoi On      Yu and Cheuk Hei Chong    1
<i>Quasi-symbolic Semantic Geometry over Transformer-based Variational AutoEncoder</i> Yingji Zhang, Danilo Carvalho and Andre Freitas
LawToken: a single token worth more than its constituents Yu-Hsiang Tseng, Hsin-Yu Chou and Shu-Kai Hsieh
Interpersonal Memory Matters: A New Task for Proactive Dialogue Utilizing Conversational History Bowen Wu, Wenqing Wang, Lihaoran Lihaoran, Yunhan Deng, Ying Li, Jingsong Yu and Baoxun
Wang
WinoWhat: A Parallel Corpus of Paraphrased WinoGrande Sentences with Common Sense Categorization
Ine Gevers, Victor De Marez, Luna De Bruyne and Walter Daelemans
Planning for Success: Exploring LLM Long-term Planning Capabilities in Table Understanding Thi-Nhung Nguyen, Hoang Ngo, Dinh Phung, Thuy-Trang Vu and Dat Quoc Nguyen
Derivational Probing: Unveiling the Layer-wise Derivation of Syntactic Structures in Neural Language Models
Taiga Someya, Ryo Yoshida, Hitomi Yanaka and Yohei Oseki 93
<i>Short-circuiting Shortcuts: Mechanistic Investigation of Shortcuts in Text Classification</i> Leon Eshuijs, Shihan Wang and Antske Fokkens
A Linguistically Motivated Analysis of Intonational Phrasing in Text-to-Speech Systems: Revealing Gaps in Syntactic Sensitivity Charlotte Pouw, Afra Alishahi and Willem Zuidema
Experiential Semantic Information and Brain Alignment: Are Multimodal Models Better than Language Models?
Anna Bavaresco and Raquel Fernández141
What is an Abstract Reasoner"? Revisiting Experiments and Arguments about Large Language Models   Tian Yun, Chen Sun and Ellie Pavlick
<i>Do Construction Distributions Shape Formal Language Learning In German BabyLMs?</i> Bastian Bunzeck, Daniel Duran and Sina Zarrieß169
Adapting Large Language Models for Movie Domain with Narrative Understanding Tasks      Siqi Shen and Amanmeet Garg      187
<i>From Stories to Statistics: Methodological Biases in LLM-Based Narrative Flow Quantification</i> Amal Sunny, Advay Gupta, Yashashree Chandak and Vishnu Sreekumar
Components of Creativity: Language Model-based Predictors for Clustering and Switching in Verbal Fluency Sina Zarrieß, Simeon Junker, Judith Sieker and Özge Alacam
What is an Abstract Reasoner"? Revisiting Experiments and Arguments about Large Language Models      Tian Yun, Chen Sun and Ellie Pavlick    156      Do Construction Distributions Shape Formal Language Learning In German BabyLMs?    169      Bastian Bunzeck, Daniel Duran and Sina Zarrieß    169      Adapting Large Language Models for Movie Domain with Narrative Understanding Tasks    187      From Stories to Statistics: Methodological Biases in LLM-Based Narrative Flow Quantification    187      From Stories to Statistics: Methodological Biases in LLM-Based Narrative Flow Quantification    201      Components of Creativity: Language Model-based Predictors for Clustering and Switching in Verbal    201

An Appraisal Theoretic Approach to Modelling Affect Flow in Conversation Corpora Alok Debnath, Yvette Graham and Owen Conlan
Principal Parts Detection for Computational Morphology: Task, Models and Benchmark Dorin Keshales, Omer Goldman and Reut Tsarfaty
Accelerating Large Language Model Pretraining via LFR Pedagogy: Learn, Focus, and Review Neha Prakriya, Jui-Nan Yen, Cho-Jui Hsieh and Jason Cong
What does memory retrieval leave on the table? Modelling the Cost of Semi-Compositionality with MINERVA2 and sBERT Sydelle De Souza, Ivan Vegner, Francis Mollica and Leonidas A. A. Doumas
Polarity inversion operators in PLM David Kletz, Pascal Amsili and Marie Candito
<i>Dynamic Epistemic Friction in Dialogue</i> Timothy Obiso, Kenneth Lai, Abhijnan Nath, Nikhil Krishnaswamy and James Pustejovsky . 323
A Three-Tier LLM Framework for Forecasting Student Engagement from Qualitative Longitudinal Data Ahatsham Hayat, Helen Martinez, Bilal Khan and Mohammad Rashedul Hasan
Bridging the Socioeconomic Gap in Education: A Hybrid AI and Human Annotation Approach      Nahed Abdelgaber, Labiba Jahan, Arham Vinit Doshi, Rishi Suri, Hamza Reza Pavel and Jia      Zhang
Construction Identification and Disambiguation Using BERT: A Case Study of NPN Wesley Scivetti and Nathan Schneider
Evidence of Generative Syntax in LLMs Mary Kennedy
Timestep Embeddings Trigger Collapse in Diffusion Text Generation      Ryota Nosaka and Takuya Matsuzaki
Investigating Psychometric Predictive Power of Syntactic Attention Ryo Yoshida, Yushi Sugimoto and Yohei Oseki
A Continuous Approach to Metaphorically Motivated Regular Polysemy in Language Models Anna Temerko, Marcos Garcia and Pablo Gamallo
Is Incremental Structure Prediction Process Universal across Languages?: Revisiting Parsing Strategy through Speculation Taiga Ishii and Yusuke Miyao
Lost in Variation? Evaluating NLI Performance in Basque and Spanish Geographical Variants Jaione Bengoetxea, Itziar Gonzalez-Dios and Rodrigo Agerri
Compositionality and Event Retrieval in Complement Coercion: A Study of Language Models in a Low- resource Setting Matteo Radaelli, Emmanuele Chersoni, Alessandro Lenci and Giosuè Baggio
<i>DLU: Dictionary Look-Up Data and Prediction</i> David Strohmaier, Gladys Tyen, Hongyi gu, Diane Nicholls, Zheng Yuan and Paula Buttery . 481
IPA CHILDES & G2P+: Feature-Rich Resources for Cross-Lingual Phonology and Phonemic Language Modeling      Zebulon Goriely and Paula Buttery      502

BabyLM's First Words: Word Segmentation as a Phonological Probing Task        Zebulon Goriely and Paula Buttery	522
GCG-Based Artificial Languages for Evaluating Inductive Biases of Neural Language Models Nadine El-Naggar, Tatsuki Kuribayashi and Ted Briscoe	540
Beyond Accuracy: Revisiting Out-of-Distribution Generalization in NLI Models Zahra Delbari and Mohammad Taher Pilehvar	557
Spatial relation marking across languages: extraction, evaluation, analysis Barend Beekhuizen	571
<i>Human-likeness of LLMs in the Mental Lexicon</i> Bei Xiao, Xufeng Duan, David A. Haslett and Zhenguang Cai	586
Vorm: Translations and a constrained hypothesis space support unsupervised morphological segnetation across languages Barend Beekhuizen	
<i>Do large language models solve verbal analogies like children do?</i> Tamar Johnson, Mathilde ter Veen, Rochelle Choenni, Han van der Maas, Ekaterina Shutova Claire E Stevenson	

### Program

### Thursday, July 31, 2025

- 09:20 09:30 Opening Remarks
- 09:30 10:30 Invited talk: Raquel Fernández
- 10:30 11:00 *Coffee break*
- 11:00 12:20 Oral session 1: Phonology, Morphology, and Syntax

A Linguistically Motivated Analysis of Intonational Phrasing in Text-to-Speech Systems: Revealing Gaps in Syntactic Sensitivity Charlotte Pouw, Afra Alishahi and Willem Zuidema

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*GCG-Based Artificial Languages for Evaluating Inductive Biases of Neural Language Models* Nadine El-Naggar, Tatsuki Kuribayashi and Ted Briscoe

- 12:20 14:00 Lunch break
- 14:00 15:30 *Poster session 1*

*HKCanto-Eval: A Benchmark for Evaluating Cantonese Language Understanding and Cultural Comprehension in LLMs* 

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### Thursday, July 31, 2025 (continued)

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### Thursday, July 31, 2025 (continued)

15:30 - 16:00 *Coffee break* 

16:00 - 17:20 Oral session 2: Semantics, Affect, and Multimodality

*Experiential Semantic Information and Brain Alignment: Are Multimodal Models Better than Language Models?* Anna Bavaresco and Raquel Fernández

A Continuous Approach to Metaphorically Motivated Regular Polysemy in Language Models Anna Temerko, Marcos Garcia and Pablo Gamallo

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An Appraisal Theoretic Approach to Modelling Affect Flow in Conversation Corpora

Alok Debnath, Yvette Graham and Owen Conlan

17:20 - 18:00 Discussion session

### Friday, August 1, 2025

- 09:30 10:30 Invited talk: Jean-Rémi King
- 10:30 11:00 *Coffee break*
- 11:00 12:20 Oral session 3: LLMs, Linguistic Structure, and Psycholinguistics

*Evidence of Generative Syntax in LLMs* Mary Kennedy

Derivational Probing: Unveiling the Layer-wise Derivation of Syntactic Structures in Neural Language Models Taiga Someya, Ryo Yoshida, Hitomi Yanaka and Yohei Oseki

*Investigating Psychometric Predictive Power of Syntactic Attention* Ryo Yoshida, Yushi Sugimoto and Yohei Oseki

Components of Creativity: Language Model-based Predictors for Clustering and Switching in Verbal Fluency Sina Zarrieß, Simeon Junker, Judith Sieker and Özge Alacam

- 12:20 14:00 Lunch break
- 14:00 15:30 *Poster session 2 (Poster Session 2 will feature the same poster presentations as Poster Session 1)*
- 15:30 16:00 *Coffee break*
- 16:00 17:00 Oral session 4: Best Paper Session

Quasi-symbolic Semantic Geometry over Transformer-based Variational AutoEncoder

Yingji Zhang, Danilo Carvalho and Andre Freitas

Accelerating Large Language Model Pretraining via LFR Pedagogy: Learn, Focus, and Review Neha Prakriya, Jui-Nan Yen, Cho-Jui Hsieh and Jason Cong

### Friday, August 1, 2025 (continued)

*From Stories to Statistics: Methodological Biases in LLM-Based Narrative Flow Quantification* Amal Sunny, Advay Gupta, Yashashree Chandak and Vishnu Sreekumar

17:00 - 17:15 *Closing*