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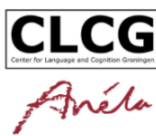


TABU Dag 2025 – 45th International Linguistics Conference
 June 12 & 13, University of Groningen, Netherlands.

BOOK OF ABSTRACTS

"Linguistics in a fast-changing society"

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Welcome to
TABU Dag 2025!

Groningen is particularly charming this time of year. With long daylight hours, tree-lined streets, and the gentle hum of bikes rolling through cobbled lanes, the city invites you to slow down, take a deep breath, and enjoy the season. Perhaps even with a book in hand at the Noorderplantsoen—accompanied, as tradition goes, by one of our local seagulls. But if you've come here with language on your mind, there's an even better reason to be in town: **TABU Dag**.

We are thrilled to welcome you to the 45th edition of TABU Dag, the University of Groningen's annual international linguistics conference, taking place on **June 12th and 13th, 2025**. Over the past four decades, TABU Dag has grown into a thriving academic gathering, bringing together students, early-career researchers, and established scholars from across the globe. This year is no exception.

We were overwhelmed (in the best possible way!) by the number and quality of submissions we received. The selection process was rigorous, and the final programme reflects the intellectual richness and disciplinary diversity that TABU Dag is known for. From neurolinguistics to computational linguistics, from language acquisition to sociolinguistics and discourse analysis, the programme showcases innovative research that challenges and expands the boundaries of linguistic inquiry.

We are also honoured to host a lineup of four incredible keynote speakers, whose work continues to shape their field in exciting ways. Their presence is a reminder of the collaborative and international spirit that defines TABU Dag.

Of course, a conference is more than its presentations, poster sessions and workshops: **it's also about conversations, connections, and community**. We invite you to join us for the conference dinner on Thursday at 6pm and closing drinks on Friday 4:30pm, where scholarly exchange can continue in a more relaxed setting.

Should you need anything, **don't hesitate to approach one of our organizers**, we'll be the ones in bright red University of Groningen t-shirts, happy to help.

Thank you for being part of TABU Dag 2025. We're so glad you're here, and we hope these two days inspire you, challenge you, and remind you **why we all fell in love with language in the first place**.

— The TABU Dag 2025 Organizing Committee

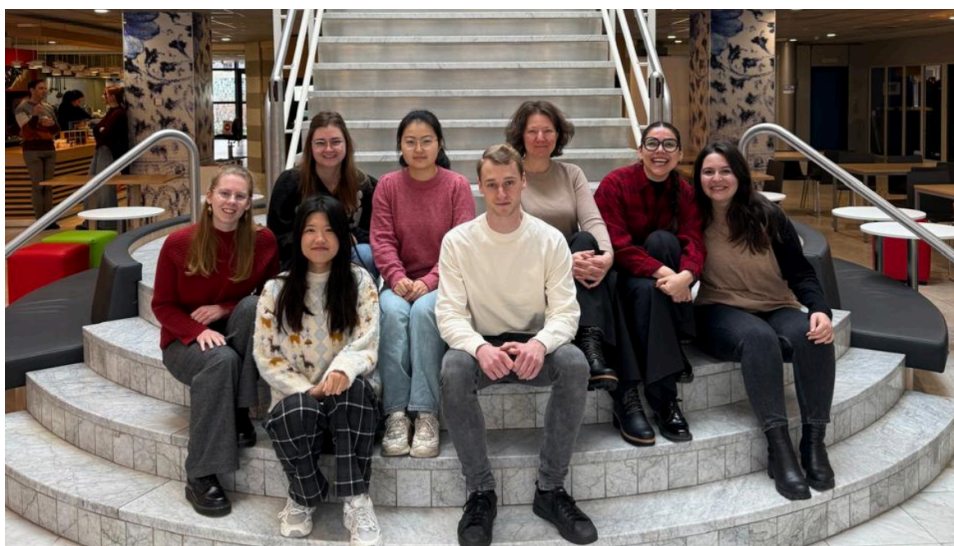
Meet the Organizing Committee 2025

We are delighted to introduce the enthusiastic team behind this year's conference. Drawn from diverse fields across linguistics and cognitive science, our organizers are dedicated to creating an inclusive and dynamic event:

Dr. Simone Sprenger – Staff Coordinator (Assistant Professor in Psycholinguistics at CLCG; her work focuses on figurative language and aging in the Semantics and Cognition Lab)

Marjolein Talsma – CLCG Coordinator (Theoretical syntactician advancing research in argument structure within the frameworks of Minimalist syntax)

Jorien de Keijzer – Chair (PhD student, interdisciplinary focus on polarization, combining conversation analysis and social psychology to investigate trigger points in small-group interactions)



María Pilar Uribe Silva – Communications (PhD candidate specializing in sustainability communication and fact-checking; her work uses large language models to detect deceptive language in ESG reports)

Maria Polychronidou – Communications (PhD candidate at Groningen & Ghent, focused on cognitive aging, idioms, and psycholinguistics via EEG and eye-tracking methods)

Jo-Anne van der Sluijs – Finances (First-year PhD candidate with IDEALAB, researching associative networks in the mental lexicon)

Sijbren van Vaals – Website Lead (First-year PhD student in Computational Linguistics, improving accessibility of Dutch news for low-literate audiences)

Zhixing Han – Secretary (Second-year PhD student in Applied Linguistics, examining individual differences in L1 Chinese learners' English writing)

Runyu Wu – Registration & Payment (First-year PhD student studying intelligibility and perception of English accents and phonological training effects)

Conference Programme Tabu Dag 2025

Thursday, 12 June 2025		
8:30 – 9:30	[Academy Building, Entrance hall] CONFERENCE REGISTRATION	
9:30 – 9:40	[Academy Building, Offerhauszaal] WELCOME BY CLCG Director: Prof. dr. Petra Hendriks	
9:40 – 10:40	[Academy Building, Offerhauszaal] Keynote by Jane Setter "Shrill and hectoring": women's voices in popular culture and academic research (Chair: Runyu Wu)	
10:40 – 11:00	[Academy building, Bruinszaal] BREAK (20 min) Coffee, tea	
11:00 – 12:00	[Academy Building, Zernikezaal] Parallel session 1 (Chair: Jorien de Keijzer)	[Academy Building, Van der Leeuwzaal] Parallel session 2 (Chair: Maria Polychronidou)
	Xingfeng Yang, Jalal Al-Tamimi, Ioana Chitoran, Martial Foegel <i>Vowel epenthesis in English word-initial consonant clusters by advanced Mandarin ESL speakers: production and perception</i>	Jo-Anne H. van der Sluijs, Elisabeth Beyersmann, Roel Jonkers, Adrià Rofes <i>Morphological fluency: A new task</i>
	Jeffrey de Boer, Alexander Martin <i>Can we use prosody to perform different genders and sexual identities? An explorative study of acted speech performances</i>	Maria Mazzoli, Eva van der Noord, Nadia Naeem, Tess Huijting, Marcela Huilcan, Hanneke Loerts <i>Testing (again) the productivity of three Dutch derivational schemas by crossing corpus-based and experimental data</i>
	Hantao Yu, Shiran Sun, Jiashu Dong, Vass Verkhodanova, Matt Coler <i>I Knew You Were Fryable: How ESL Speakers Perceive Vocal Fry</i>	Charisti Styliara, Srdjan Popov <i>Pre-experimental Instructions and Distractors as Design Choices in Language-based EEG experiments</i>
12:00 – 13:00	[Academy building, Bruinszaal] LUNCH BREAK (60 min)	
13:00 – 14:00	[Academy Building, Offerhauszaal] Keynote by Massimo Stella Multilayer cognitive networks as models of conceptual knowledge in humans and LLMs (Chair: Jo-Anne van der Sluijs)	

14:05 – 14:40	[Academy Building, Offerhauszaal] <u>Workshop: An Introduction to Eye Tracking in Language Research by SR Research</u>	
14:40 – 15:10	[Academy building, Bruinszaal] BREAK (30 min) Coffee, tea	
15:10 – 16:30	[Academy Building, Zernikezaal] Parallel session 3 (Chair: Jo-Anne van der Sluijs)	[Academy Building, Van der Leeuwzaal] Parallel session 4 (Chair: Runyu Wu)
	Francesca Padovani, Jaap Jumelet, Yevgen Matuskevych, Arianna Bisazza <i>What is the real benefit of using Child Directed Language for Language Modeling?</i>	Seonok Lee, Suzanne Dekker, Dylan Rose <i>Who Is Considered Competent? Accentism, Language Attitudes, and Student Evaluations in a Dutch University</i>
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	Maria Pilar Uribe Silva, Rik van Noord, Erika Darics, Malvina Nissim <i>Automating Deception Detection in Sustainability Reports</i>	Eva van Kampen, Dr. Remco Knooihuizen <i>Conservative in Speech or Radically different? Written and Spoken Variation in Eastern Norway</i>
	Nastja Shaboltas, Ana Guerberof-Arenas <i>The creative process in translation of literary texts and the effect of technology</i>	Dimitriy Yaroshchuk, Dr Remco Knooihuizen <i>Priming effects of English ‘they’ on non-binary pronouns in Dutch</i>
16:40 – 17:40	[Harmony Building, Marie Loke zaal] POSTER SESSION A	
CONFERENCE DINNER – Happy Italy (18.00 – 21.00)		

Friday, 13 June 2025	
8:30 – 9:00	[Academy Building, Entrance hall] CONFERENCE REGISTRATION
9:00 – 10:00	[Academy Building, Offerhauszaal] Keynote by Peter Muntigl Communicative abilities and deficits in ‘atypical’ populations: A view from conversation analysis (Chair: Jorien de Keijzer)

10:10 – 11:10	[Academy Building, Zernikezaal] Parallel session 5 (Chair: Zhixing Han)	[Academy Building, Van der Leeuwzaal] Parallel session 6 (Chair: Sijbren van Vaals)
	Kohei Haneda, Anja Schüppert, Roel Jonkers <i>When Silence Speaks: The Impact of Visual Cues in Real-time Ellipsis Resolution</i>	Valerie Querner, Dr. Steven Gilbers, Dr. Jasmin Pfeifer <i>Schade! Irony Production of Individuals with Congenital Amusia</i>
	Mieke Slim, Caroline F. Rowland <i>Are 'each' and 'all' the same? A study on the development of universal quantifiers in Dutch</i>	Madeline Philipsen, Manon Winkler, Lena Rybka, Julia Onken, Peter Vajkoczy, Thomas Picht, Adrià Rofes <i>Noun and Verb Association in Individuals with Brain Tumours: A New Test in German</i>
	Emine Demir-Okumuş, Berna Balcı-Harmandar, Tolunay Ekiz <i>From Learning Styles to Learning Skills: The Interplay between English Language Learners' Learning Styles and Their Performance in Receptive Language Skills</i>	Amber Marree, Jacopo Torregrossa, Petra Hendriks, Irene Mognon <i>The influence of the connector but on the processing of negation</i>
11:10 – 11:30	[Academy building, Restaurant in the basement] BREAK (20 min) Coffee, tea	
11:30 – 12:40	[Academy Building, Zernikezaal] Parallel session 7 (Chair: Simone Sprenger)	[Academy Building, Van der Leeuwzaal] Parallel session 8 (Chair: Maria Pilar Uribe Silva)
	Ekaterina Volodina, Chupina, I., Kessels, R.P.C, Esselink, R.A.J., Vinke, R.S., Roelofs, A., Piai, V. <i>Verb Inflection in Parkinson's Disease: Performance under Pharmacological Intervention and Deep Brain Stimulation</i>	Xuedi Han, Erika Darics, Janet Fuller, Gisela Redeker <i>Platform-mediated affinity space: Situated Identity Construction and Compliance Strategies in Companion Service</i>
	Valentine Lucquiault, Thomas Tienkamp, Hedwig Sekeres, Teja Rebernik, Martijn Wieling, Defne Abur <i>Vocal motor control of pitch across age in adulthood</i>	Tetiana-Yelyzaveta Tsapenko <i>Environmental Influences on Children's Communicative Behaviour: A Multimodal Semiotic Perspective</i>
	Irene de Nijs, Thomas Tienkamp, Teja Rebernik, Rob van Son, Martijn Wieling, Max Witjes, Sebastiaan de Visscher, Defne Abur <i>Longitudinal assessment of articulatory-kinematic variability in individuals surgically treated for tongue cancer</i>	
12:40 – 13:40	[Academy building, Restaurant in the basement] LUNCH BREAK (60 min)	
13:40 - 14:15	[Academy Building, Offerhauszaal] <u>Workshop: Streektaalstrijd – Popularizing Linguistic Knowledge through a Board Game</u> by Raoul Buurke and Lourens Visser	

14:20 – 15:20	[Academy Building, Offerhauszaal] Keynote by Katja Haeuser Effects of prediction in the moment and beyond (Chair: Maria Polychronidou)
15:30 – 16:30	[Harmony Building, Marie Lokezaal] POSTER SESSION B
16:30 - 18.00	[Harmony Building, Weberfoyer] CLOSING DRINKS <i>Tag us in your posts with your reflections, questions, or favorite moments of the conference: #TABUDag2025</i> <i>Find us on Instagram, LinkedIn, and BlueSky → @tabudag</i>

Sponsors of the Tabu Dag 2025

TABU Dag would not be possible without the support of our dedicated sponsors. We are grateful to the following organizations for making this event a reality:

- **Center for Language and Cognition Groningen (CLCG)** – Our home base and ongoing academic partner.
- **BCN, Fryske Akademy, SR, Globaltextware, Anéla, AVT, GUF, and LOT** – Long-time supporters whose contributions have enriched the conference across recent editions.
- **Instituut voor de Nederlandse Taal** – Actively supporting academic linguistics, they play a key role in promoting regional language research.

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Keynotes

Keynote session 1

"Shrill and hectoring": women's voices in popular culture and academic research
Professor Dr. Jane Setter - University of Reading

Abstract

Discrimination on grounds of gender is something most people are familiar with as a concept. What may be less well understood is how women, both cis-gender and trans-gender, face criticism and prejudice daily for the way they speak. Focusing on voice quality, uptalk, and pitch range, this presentation examines the relationship between the voice and gender discrimination in popular culture and academic research. After considering the historical backdrop, in which cis-gender, male voices were taken as default in research, and pointing to media examples where the voice operates as a site for gender bias, my colleagues and I consider the extent to which research in phonetics and adjacent fields reinforces popular misconceptions, and how useful it is for combatting voice-related gender prejudice. Pointing to promising examples of research on women's voices as well as gay, gender non-conforming and transgender voices, the talk concludes by suggesting that research in this area be communicated to wider audiences to inform professional practices.

Bio

National Teaching Fellow of Advance HE and Senior Fellow of the UK Higher Education Academy, Professor Jane Setter is a member of the Council of the International Phonetic Association (IPA), on the editorial board of the Journal of Second Language Pronunciation, and on the advisory panel of Babel: The Language Magazine, to which she contributes regular columns "Giving Voice A Voice" and "A Clash Of Symbols". She is a regular contributor to the University College London Summer Course in English Phonetics and has acted as an examiner for the IPA Certificate of Proficiency in the Phonetics of English.

Professor Jane Setter is School Director of Academic Tutoring and Departmental Admissions and Recruitment Officer. Her outreach activities include visiting schools to give talks to students and organising and teaching on our INSET course for teachers of A level English Language. She has also run refresher courses in Grammar and Phonetics for Speech and Language Therapists with colleagues in the School of Psychology and Clinical Language Sciences.

Professor Jane Setter is probably best known as co-editor of the eighteenth edition of the Cambridge English Pronouncing Dictionary (CUP, 2011), for her popular science book *Your Voice Speaks Volumes: It's not what you say but how you say it* (OUP, 2019) and, most recently, for the Cambridge Handbook of Phonetics (CUP, 2021). Her main research interests are English phonetics and phonology, English pronunciation and intelligibility (including in World and learner Englishes), phonology in atypical speech populations (specifically Williams syndrome), and phonetics and phonology in Hong Kong English; her particular interest is in prosodic aspects of speech such as rhythm and intonation. She has held UK and international research grants and published widely, and is a popular keynote speaker, both at home and abroad.

Multilayer cognitive networks as models of conceptual knowledge in humans and LLMs

Dr. Massimo Stella - University of Trento

Abstract

Cognitive network science is a powerful mathematical and computational framework – distinct from artificial neural networks – for investigating the organisation of mental representations of conceptual knowledge. These representations are structured and involved in several cognitive phenomena relative to language acquisition, storage and processing. Understanding the structure of conceptual relationships, e.g. synonyms, memory recalls, phonological similarities, can shed light not only on cognitive phenomena where language is key but also on social phenomena where language enables communication. This seminar focuses on recent advances in: (i) investigating together interactive aspects of conceptual knowledge via multilayer cognitive networks built from behavioural and/or textual data, and (ii) exploring how cognitive networks can be used to reconstruct and understand biased perceptions in online social media and in Large Language Models (LLMs).

Bio

Massimo Stella is Senior Researcher and Professore su Chiamata Diretta dall'Estero at the Department for Psychology and Cognitive Science, University of Trento, Italy. PI of CogNosco Lab, he published more than 80 papers and his research interests include cognitive data science, complex networks and AI psychometrics. Fellow of the Psychonomic Society, he was recently awarded a 1.3 mil. FIS Starting Grant from the Italian Ministry of Research for investigating the psychological implications of human-LLM interactions.

His research focuses on cognitive networks, AI psychometrics, and knowledge modelling, with a particular interest in combining artificial intelligence, network modeling, and psychometrics to infer and understand psychological constructs from mixed and multivariate data.

His methodological toolkit includes complex networks, natural language processing, and mathematical techniques for data manipulation over discrete structures. Dr. Stella has introduced several innovative quantitative frameworks for investigating psychological phenomena, including:

- Multiplex lexical networks
- Behavioural forma mentis networks
- Text-mining forma mentis networks

His current work aims to strengthen psychometric measurement of psychological constructs using complex networks, in synergy with methods such as network psychometrics and Item Response Theory (IRT) models, which he relates to Ising models in statistical physics.

His teaching style combines the mathematical background of a data scientist with the attention to the cognitive processing of a cognitive scientist. During lectures, he boost attention through emotional contagion and promotes positive learning environments, which in turn boost creativity and reduce STEM anxiety.

Abstract

Humans rely on prediction to navigate the world. In fact, our human brains are essentially prediction machines that constantly compare and evaluate new incoming information against internalized representations of the world (called schemas). A unique human trait that also capitalizes on prediction is language processing. For example, most people would complete a sentence such as “Bavaria is known for making excellent ...” with the word “beer”, whereas other completions such as “pretzels” or “sausages” (even though they are plausible) seem far less likely. But what precisely is it that we predict when we predict? Do we primarily predict broad semantic features of upcoming input, or do we predict entire word forms? Which individual differences and development trajectories modulate our capacity to engage in prediction? And how does predictive language processing aid memory formation? Are there conditions when prediction is actually “bad” for memory?

In this keynote, I will present past and ongoing work in my lab that has investigated these questions. I will begin by exploring how the comprehension of idiomatic expressions (a special type of predictable language) changes during old age, and whether our ability to understand idioms in context is modulated by domain-general cognitive functions such as inhibitory control. I will then present a spotlight account of prediction that relates developmental changes in predictive processing to capacity limitations in children and older adults. I will conclude with my most recent work on the prediction-memory interface. In this work, I show that both prediction error and schema congruency impact memory formation independently from one another, and that prediction sometimes has unexpected side effects on memory - false remembering.

Bio

Dr. Katja I. Haeuser is a researcher in the Department of Psychology at Saarland University, where she is part of the Lifespan Cognition Lab. Her work explores how language is processed across the human lifespan, with a particular focus on predictive language processing, the comprehension of idioms and metaphors, and individual differences in linguistic and cognitive abilities. Her research also engages with key questions in neurolinguistics, bridging cognitive psychology and language science.

Dr. Haeuser’s interdisciplinary approach combines psycholinguistic experimentation with cognitive modeling to better understand how language is processed in real-time and how this ability changes across age groups.

Communicative abilities and deficits in ‘atypical’ populations: A view from conversation analysis

Dr. Peter Muntigl - Ghent University

Abstract

Perspectives on mental and neuropsychological health tend to be dominated by what has been traditionally called a biomedical model. This model aligns with an intrapersonal, cognitive view of mental/neuropsychological illness that is rooted in atypical, maladaptive or neurodegenerative brain and cognitive functioning. The focus tends to be on persons’ deficits: what they no longer can do or what they do in a maladaptive way. A competing model, which arose from the ‘discursive turn’ in many academic disciplines, offers an alternative, interpersonal and interactional-based perspective. In this model, there is a shift from the individual to the social-relational and from deficits to persons’ communicative competencies or skills. In this presentation, I draw from my own research that has examined naturally occurring conversations involving persons with dementia. Adopting the lens of conversation analysis, I show examples of real-life interactions that challenge the binary notions of “normal” vs. “abnormal” and “deficit” vs. “skill”. It is argued that an analytic view that attempts to capture both sides of the spectrum (deficit and skill) can provide a more nuanced account of the interactional complexities of the social encounter. Further, deviation from what is normal (atypical) does not necessarily equate with failure or deficit but may point to real world challenges that require practical solutions.

Bio

Peter Muntigl is a researcher at Ghent University and an adjunct professor at Simon Fraser University (Canada). Peter obtained his PhD in Linguistics (Simon Fraser University) and later received his habilitation in English and applied linguistics (Salzburg University). He draws from the methods of conversation analysis to explore the following research domains: Health care communication (psychotherapy/ communication disorders / clinician-patient consultations); Conflict talk; and how social relationships are interactionally managed. Over the years, his research has received SSHRC funding to investigate how the “talking cure” in psychotherapy and family therapy is interactionally accomplished. In recent years, he has begun to examine interpreter-mediated psychotherapy conversations in different migrant populations. His recent publications include a monograph entitled *Interaction in Psychotherapy* (2024; Cambridge University Press) and two co-edited volumes: *Dementia and Language* (2024; Cambridge University Press) and *The Routledge International Handbook of Postmodern Therapies* (2025; Routledge).

Workshop

Workshop 1

An Introduction to Eye Tracking in Language Research

By SR Research

Abstract

This workshop will provide a brief overview of the uses of eye tracking in language research, including the use of gaze-contingent tasks and the visual world paradigm for spoken language comprehension. Students using, or thinking about using EyeLink eye trackers will discover how to optimize their hardware setup, get the most out of stimulus presentation software, and maximize, measure and report eye tracking data quality.

Workshop 2

Streektaalstrijd: Popularizing linguistic knowledge through a board game

By Raoul Buurke and Lourens Visser

Abstract

Raoul and Lourens will take you through the origin, development, and financing of an educational board game about regional languages and linguistics. Special attention will be paid to the practical difficulties they encountered and steps you can undertake to develop a board game yourself.

Parallel Sessions

Parallel session 1

Vowel epenthesis in English word-initial consonant clusters by advanced Mandarin ESL speakers: production and perception

Xingfeng Yang, Jalal Al-Tamimi, Ioana Chitoran, Martial Foegel

Université Paris Cité, France.

Abstract

This study investigates vowel epenthesis in English word-initial consonant clusters by advanced Mandarin ESL speakers, examining production variability and its link to perception.

Experiment I utilized an AXB discrimination task and a real-word production task. Twenty Mandarin speakers and eight English speakers (control group) were recruited. In the AXB task, participants were required to discriminate between eight word pairs, e.g., *parade* (C1ɹC2) vs. *prayed* (C1C2). In the production task, participants read pairs of English words containing identical consonant clusters. Insertion was identified when visible gaps with formant-like structures and intensity peaks were observed within a cluster. A generalized linear mixed model revealed that insertion significantly reduced accuracy ($\beta = -0.790, p < 0.001$), while native English language proficiency significantly improved accuracy ($\beta = 1.182, p < 0.001$), with participant-level random effects accounting for variability in performance. The model is currently being refined, and potential interactions (e.g., between insertion and word or cluster) are under exploration to further enhance the analysis.

Experiment II, currently underway, employs an AXB discrimination task using non-word syllables (e.g., /ple/ vs. /pəle/) to isolate pure auditory discrimination without engaging the mental lexicon. The same participants from Experiment I are involved, with 16 Mandarin speakers and six English speakers from the previous cohort having participated so far. Preliminary results from a generalized linear mixed model indicate that neither insertion ($\beta = -0.187, p = 0.470$) nor native English language proficiency ($\beta = 0.383, p = 0.395$) had a significant effect on accuracy.

Although both groups demonstrated very high accuracy in both experiments, the contrasting results between Experiment I and Experiment II may suggest that the mental lexicon plays a crucial role in the perception and production of real words, whereas non-word perception primarily involves auditory processing.

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Can we use prosody to perform different genders and sexual identities? An explorative study of acted speech performances

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Abstract

The study aims to uncover how Dutch-speaking actors portray different genders and sexual identities through speech prosody. The study is grounded in gender performativity theory, which argues that “gender is the repeated stylization of the body, a set of repeated acts” (Butler, 1990/1999, p. 43, see also 2004) that uphold social gender norms and can lead to stereotyping. Certain speech features have thus become associated with specific genders and sexualities: speech of women has been claimed to use higher fundamental frequency and wider intonation and breathier voice quality (English: Klatt & Klatt, 1990; English and French: Pépiot, 2014, 2015) compared to the speech of men. Similarly, speech of gay men has been claimed to be characterised by the “gay lisp”, or a fronted/hyperarticulated /s/ (Dutch: Van Borsel et al., 2009; English: Munson et al., 2006; Mack & Munson, 2012) and higher fundamental frequency (Dutch: Baeck et al., 2011; French: Russell, 2017). In this study, the performativity of gender and sexuality is assessed through actors' performances of personae (characters) with different genders and sexualities. Audio recordings of the actors' embodiments are used to study fundamental frequency characteristics, intonation contours, formants, and vocal quality within and between personae. Results are expected to show male actors raising their fundamental frequency (Fo) and adopting more breathy voice when they are portraying female characters compared to when they are portraying male characters, and female actors decreasing their Fo while performing male characters. The study contributes to empiricism on gendered speech in Dutch, aims to uncover gender stereotypes underlying the actors' performances, and show how performativity theory connects to linguistics.

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I Knew You Were Fryable: How ESL Speakers Perceive Vocal Fry

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Abstract

Vocal fry, characterized by a low-frequency creaky voice quality, is a sociolinguistic marker in American English that often leads to negative perceptions of female speakers (Leung et al., 2021; Taylor et al., 2022). In Dutch, however, it functions primarily as a prosodic feature without such sociolinguistic connotations (Van Hugte & Heeren, 2024). This study examines whether Dutch listeners with English as a Second Language (ESL) exhibit gender-biased perceptions of vocal fry, as seen in native English speakers, considering cognitive load during second language processing affects sensitivity to paralinguistic features (Zhu & Aryadoust, 2022).

We hypothesize that while Dutch ESL listeners may show some gender bias in vocal fry perception due to exposure to American media, this bias will be less pronounced than among native English speakers due to cognitive resource allocation during L2 processing and the different linguistic status of vocal fry in Dutch.

Our methodology employs controlled speech samples from the People's Speech Dataset (Galvez et al., 2021), balanced for gender and vocal fry presence. Dutch advanced ESL speakers (C1 level) will

rate speakers' confidence, professionalism, and trustworthiness on 5-points Likert scale. Using ordered logistic regression, we will analyze how speaker gender, vocal fry presence and listener gender influence perceptions, while controlling for English media exposure.

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Parallel session 2

Morphological fluency: A new task

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Abstract

Introduction: In verbal fluency tasks, participants name as many words as possible that belong to a specific category in one minute. Often, these tasks focus on word retrieval based on semantics (e.g., animals) or phonology (e.g., words starting with the letter F) (Shao et al., 2014). Nevertheless, morphological information also affects lexical retrieval (e.g., Beyersmann et al., 2016).

Aim: We aimed to understand whether, and if so how, people may produce morphologically related words in response to cue words in a new morphological fluency task.

Methods: Dutch native speakers (n = 34 after exclusion, aged 20-62) were given 24 Dutch words, with one minute per cue to type as many morphologically related words as possible. Cues included both nouns and verbs with large (ranging 25-56) and small (ranging 2-9) morphological family sizes

(Baayen et al., 1995; WebCelex, 2017). Responses were classified by morphological structure (compound, derivation, and/or inflection) or error type.

Preliminary results: On average, 5.37 (standard deviation 3.07) responses were given per cue. The number of responses was significantly higher for words with large compared to small family sizes. Additionally, the proportion of correct responses was significantly higher for large compared to small family sizes as well as for verbs compared to nouns. Statistically, compounds were produced relatively more often for nouns than for verbs. The reverse was found for inflection. Only given small family size, relatively more errors were nonwords for nouns than for verbs.

Discussion: Generally, and new to the literature, participants can produce morphologically related words in a fluency task. The number and type of correct responses are affected by morphological family size and the morphological restrictions for nouns and verbs in Dutch. Future work will focus on performance by individuals with language impairments, and on word networks constructed from the fluency task.

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Testing (again) the productivity of three Dutch derivational schemas by crossing corpus-based and experimental data

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Abstract

We present a study on the productivity of three Dutch constructions: be-N-en, V-baar and N/V-(e)lijk. We looked at productivity by crossing linguistic evidence of actual use (corpus-based metrics) and of cognitive entrenchment (speakers' perception of productivity, i.e. transparency and intuition of well-formedness). Our research questions:

- Are corpus-based metrics and/or construction type predictive of perceived productivity?
- Are nonce words (well-formed potential words) patterning with existing words in terms of understandability and well-formedness?

We build two datasets. We collected frequency measures for -baar, -(e)lijk, and be-N-en (Sketch Engine Dutch Web 2020), including number of types and potential productivity (Baayen & Rochelle 1991). We also elicited understandability and well-formedness through a web based survey in which the three constructions are crossed with four conditions: nonce, low frequency, high frequency, and pseudo words. The category of nonce is further divided in three sub-conditions: fully-fitting bases, non-fully-fitting bases (niche) and borrowings.

In a pilot study (presented at Tabu Dag 2024), 41 participants completed a similar survey. A binary logistic regression analysis indicated that nonce words pattern with low frequency words in terms of

their understandability, but stand out when it comes to the perception of their potential use. Surprisingly, there were no (statistically) significant differences based on the construction. However, in the current study we have improved multiple core design features.

We hypothesize that corpus-based metrics will be predictive of perceived productivity, and that there will be a significant difference in perceived productivity for the different constructions. Linguists have inferred productivity from corpus-based metrics and often found a correlation with intuitions (Schmid 2010), although this is not straightforward (Gilquin 2010; Arppe et al. 2010). We have no hypothesis about the patterning of nonce words in terms of understandability and well-formedness, given lack of research available (Štekauer 2002, Guz 2012).

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Pre-experimental Instructions and Distractors as Design Choices in Language-based EEG experiments

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Abstract

Pre-experimental instructions comprise an integral part of an experimental setup and can be encountered in different types and forms. For instance, they may be provided as written instructions, or they may be inferred from a verbal interaction between the researcher and the participant of an experiment. In addition, they are often restricted to the procedural description of what the participant is asked to do, but they may also include the description of the experiment's goals. However, the actual level and type of usefulness that these instructions offer has recently been brought into question (Hillman et al., 2018). Focusing on sentence processing experiments – particularly those comparing grammatical and ungrammatical features – two additional aspects of experimental design play a crucial role: the type of distractors/filler items used and the control task, typically in the form of a question displayed after experimental stimuli. Such a question can be a comprehension question, which aims to avoid drawing the participant's attention to the target stimuli (Keating & Jegerski, 2015), or it can be a grammaticality judgement question. While some work (Osterhout et al., 2002) looked into the role of the control question, little experimental work has investigated the effect of familiarizing participants with the research question before the experiment or the influence of the filler type. Therefore, the current event related potentials (ERPs) study investigates the effect of a) pre-experimental instructions and b) fillers on the processing of

sentences containing morphosyntactic violations. Two groups of native speakers of Greek will participate in the study. Participants will be presented with sentences word-by word on a computer screen, while their electroencephalogram is being recorded. In Experiment 1, both groups will be shown grammatical (control), ungrammatical (experimental) and garden-path (filler) sentences and the only difference between the groups will be the type of pre-experimental instructions that they receive. In Experiment 2, both groups are exposed to grammatical (control) and ungrammatical (experimental) sentences. For the filler sentences, the first group is given grammatical and ungrammatical sentences, including a different type of morphosyntactic error from the control and the experimental sentences, while the second group is shown semantically congruent and incongruent sentences.

This is an ongoing project, which aims to provide the research community with helpful insights with respect to design choices in sentence processing EEG experiments.

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Parallel session 3

What is the real benefit of using Child Directed Language for Language Modeling?

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Abstract

Recent studies (Huebner et al., 2020; Salhan et al, 2024) have demonstrated that language models (LMs) trained on Child-Directed Language (CDL)—the language adults and caregivers use to communicate with children—can achieve syntactic competencies comparable to those of much larger models trained on internet-crawled data.

But what intrinsic properties of CDL enable its success despite limited lexical variability and simple syntactic constructions?

The syntactic abilities of LMs have been probed using acceptability judgment benchmarks (e.g BLiMP, Zorro and CLAMS) (Huebner et al., 2020; Warstadt et al., 2020; Mueller et al., 2020) which measure their accuracy in assigning higher probabilities to grammatical over minimally different ungrammatical sentences. While covering diverse syntactic paradigms, these benchmarks typically report overall accuracy, without examining paradigm-specific difficulty or learning curves (Bunzeck et al., 2024). Moreover, LMs' evaluations often fail to fully isolate syntactic abilities from lexical learning, as minimal pairs may contain tokens unseen during training. This research aims to better disentangle LMs' syntactic capabilities by analyzing specific syntactic paradigms, particularly those where CDL-trained models outperform Wikipedia-trained models. We address the following questions:

- How does the composition of training data (CDL vs. Wikipedia) influence model behavior?

- Does the CDL register benefit only early learning stages or the entire learning process?

While the majority of existing research has focused on English, our work seeks to broaden this analysis to other languages, starting from those where sizable CDS corpora as well as minimal pairs benchmarks exist (e.g. French and German). Preliminary results with GPT-2-base and RoBERTa-base models show that CDL-trained models outperform Wikipedia-trained ones only in specific benchmarks and paradigms—overall in Zorro and for simple agreement in CLAMS. In addition to bringing novel insights on what makes language learning efficient in neural-network learners, our findings can ultimately inspire the design of new data augmentation techniques to improve the performance of LM-based NLP applications for low-resource languages.

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Reading Time Prediction for Dutch Text Simplification

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Abstract

Text simplification aims to reduce complexity in vocabulary and syntax to improve the readability and comprehension of a text (Hobo et al., 2023, Seidl & Vandeghinste, 2024), and plays an important role in improving text accessibility. Readability and reading time prediction offer tools for assessing text complexity, allowing for effective simplification strategies. Prior studies have explored linguistic features to improve readability assessment (Feng et al., 2010), but there remains no clear consensus on the most effective predictors (De Clercq and Hoste, 2016). Moreover, integrating reading time prediction into simplification workflows remains an underexplored area.

Through a direct collaboration with the Dagblad van het Noorden newspaper, we model text complexity via reading time and readability, assuming that more difficult texts take longer to read and have lower readability scores. Using a curated Dutch news article dataset with gold-standard reading times, we extract and analyse linguistic features to develop a predictor that estimates the average reading time per token, accounting for varying text lengths. Preliminary results show that specific features emerge at multiple linguistic levels (syntax, lexicon, etc) that are indeed good predictors of reading time.

Concurrently, large language models are also asked to assess reading time per token as well as readability, together with explanations supporting their answers, thereby yielding potential insight into the linguistic aspects they prioritise for their assessments. By combining these insights with our predictive feature analysis, we aim to steer the process of text simplification. Automatic as well as human-based evaluation, run in collaboration with the newspaper and considering both original and simplified texts, will be used to assess the validity of exploiting the extracted features for effective simplification.

This research aims to bridge the gap between reading time prediction, readability assessment, and text simplification, by developing an approach to automatically simplify Dutch news articles, making them more accessible to a wider audience.

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Automating Deception Detection in Sustainability Reports

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Abstract

The study of deceptive language has expanded beyond direct lies to include nuanced and indirect forms of deception (Galasiński, 2000). While advancements in Natural Language Processing (NLP) and automated fact-checking have improved the detection of explicit falsehoods in journalism and other domains (Thorne & Vlachos, 2018), the automated detection of complex deceptive strategies remains a challenge. In particular, Sustainability reports, such as Corporate Social Responsibility (CSR) and Environmental, Social, and Governance (ESG) disclosures, often contain deceptive language that, while not explicitly false, can mislead through strategic vagueness, omission, or exaggeration. Given the growing volume of such reports and the introduction of new regulations, such as global and EU climate targets (e.g., the Effort Sharing Regulation), which require reduced vagueness in corporate communication, there is an increasing need for automated tools capable of detecting and analysing deceptive language at scale.

To address this gap, this study focuses on advancing automated deception detection in sustainability communication. We propose a framework for identifying and classifying deceptive linguistic patterns in sustainability reports, introducing a novel taxonomy called the "Deceptive Language Spectrum". This taxonomy is based on related work in the fields of business and corporate communication deception. To apply this framework, we compile a dataset comprised of a corpus of 2023 and 2024 sustainability reports, extracted and labelled for deceptive strategies corresponding to selected deception categories.

Our methodology involves utilizes computational linguistic techniques using Large Language Models (LLMs). Our first experiments leverage the GPT-4 model to detect deceptive linguistic patterns. Preliminary results demonstrate that:

(1) GPT-4 effectively supports human reviewers in identifying linguistic expressions aligned with deception categories;

(2) The model provides human-understandable explanations, which could benefit both researchers and businesses aiming for clearer sustainability communication.

This research contributes to the development of a robust theoretical framework and experimental methodology for detecting deceptive language in sustainability reporting.

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The creative process in translation of literary texts and the effect of technology

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Abstract

Creative process in literary translation is rooted in finding new adequate solutions that depart from the source text to provide the reader of the target text the same experience as that of the source reader (Guerberof-Arenas, Toral, 2022). To uncover what the creative process entails, two levels of analysis have been suggested (Botella, Nelson, Zenasni, 2017). At the macro level, the creative process consists of major stages: preparation, incubation, illumination, and verification (Wallas, 1926). At the micro level, the processes behind generating new ideas, such as divergent thinking and insight (Botella, Nelson, Zenasni), are investigated. While these frameworks have been applied to the creative process in art, design and science (Botella, Lubart, 2015), the creative process in literary translation remains an underexplored topic.

To address this research gap, we have devised two experiments with professional literary translators. In the first one (WP1), we explore the creative process in translation by applying methods from creativity research in psychology. Our goal is to develop a framework of the macro stages of literary translation based on self-reports from ten Dutch and ten Catalan literary translators using surveys, creative process diaries (CRDs) (Botella, Nelson, Zenasni, 2017), and interviews.

In the second study (WP2), we explore the micro level of creativity in literary translation and the effects of technology on translation. Firstly, we seek to identify and classify translational problems, such as metaphors that translators need to solve creatively, called units of creative potential (UCPs) (Fontanet, 2005, Bayer-Hohenwarter, 2011, Guerberof-Arenas & Toral, 2020). Secondly, we use eye-tracking and retrospective think aloud protocol to measure cognitive load of the translators when dealing with UCPs and identify the benefits and constraints of machine translation (MT) in the creative process. We present the overall experimental design for this research project as well as preliminary results from WP1.

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Parallel session 4

Who Is Considered Competent? Accentism, Language Attitudes, and Student Evaluations in a Dutch University

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This study examines students' explicit attitudes toward non-standard English varieties in academia through the lenses of accentism and raciolinguistics (Flores & Rosa, 2015; Rosa & Flores, 2017; Ramjattan, 2019; 2023; Orelus, 2023). Using a mixed-methods approach, we analyzed survey data (N=190) and interviews (N=13) from students at a Dutch university. Participants rated lecturers from four imagined accent groups – English (e.g., British/American), Dutch, Middle Eastern, and East Asian – on professionalism, comprehension, and sociability.

Survey results showed that English accents were rated highest, with “Native Language” as a key predictor: native Dutch speakers rated English accents significantly higher and East Asian accents lower, while native English speakers rated English accents comparatively lower than other groups. Interviews revealed five themes: standardized English as the ideal, accent reduction, professional perceptions, accent hierarchies, and overcoming bias.

Findings highlight the persistence of accentism in academia, where evaluations of non-standard English accents are shaped by racial hierarchies and internalized bias. This study contributes to accent attitude research (Tsurutani, 2012; Houbak, 2019; Hendriks et al., 2016; 2018; 2023; Nejari et al., 2020; Rosseel, 2021) by advocating for increased awareness of linguistic diversity in English Medium Instruction (EMI) and interventions to mitigate racial bias in academic settings.

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Listener Perceptions of Accented Synthetic Speech: Analyzing the Impact of L1

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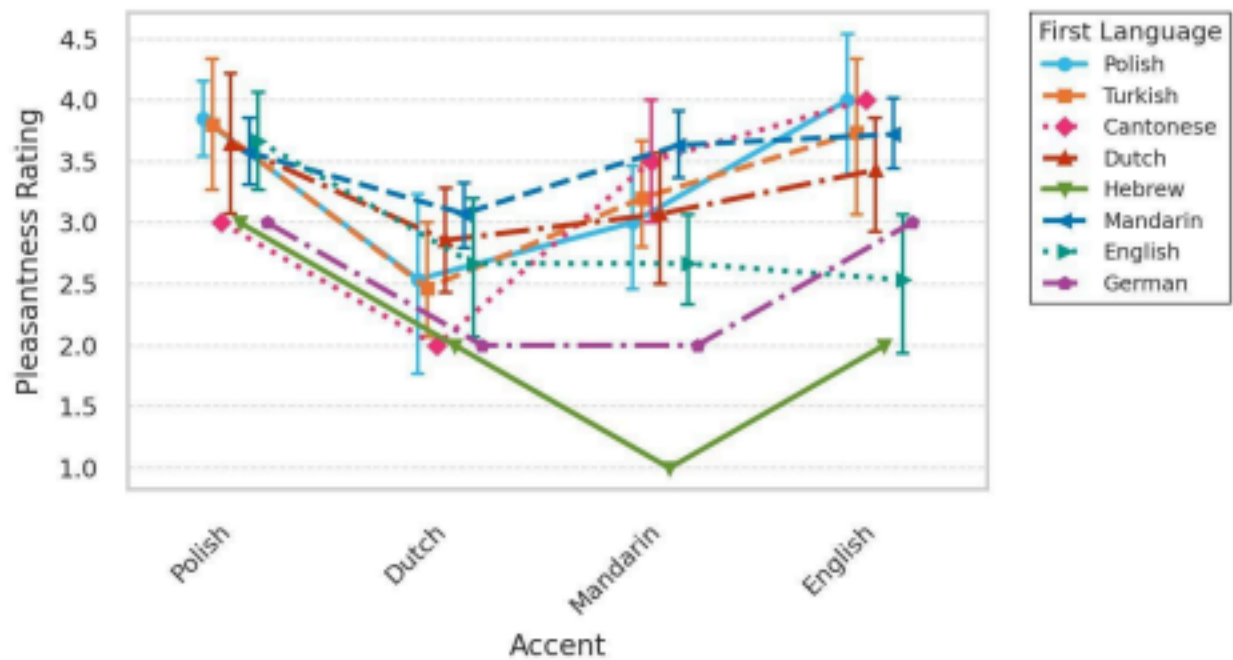
Abstract

This study investigates how listeners' first language (L1) influences perceptions of pleasantness and trustworthiness in accented synthetic English speech. While research on Text-to-Speech (TTS) systems often prioritizes intelligibility and naturalness, user acceptance and emotional response — such as perceived trustworthiness and pleasantness — play a crucial role in applications like virtual assistants and customer service bots (Nordheim, 2018). Drawing on Miao (2024), our study explores whether accent familiarity affects these perceptions among listeners from diverse linguistic backgrounds.

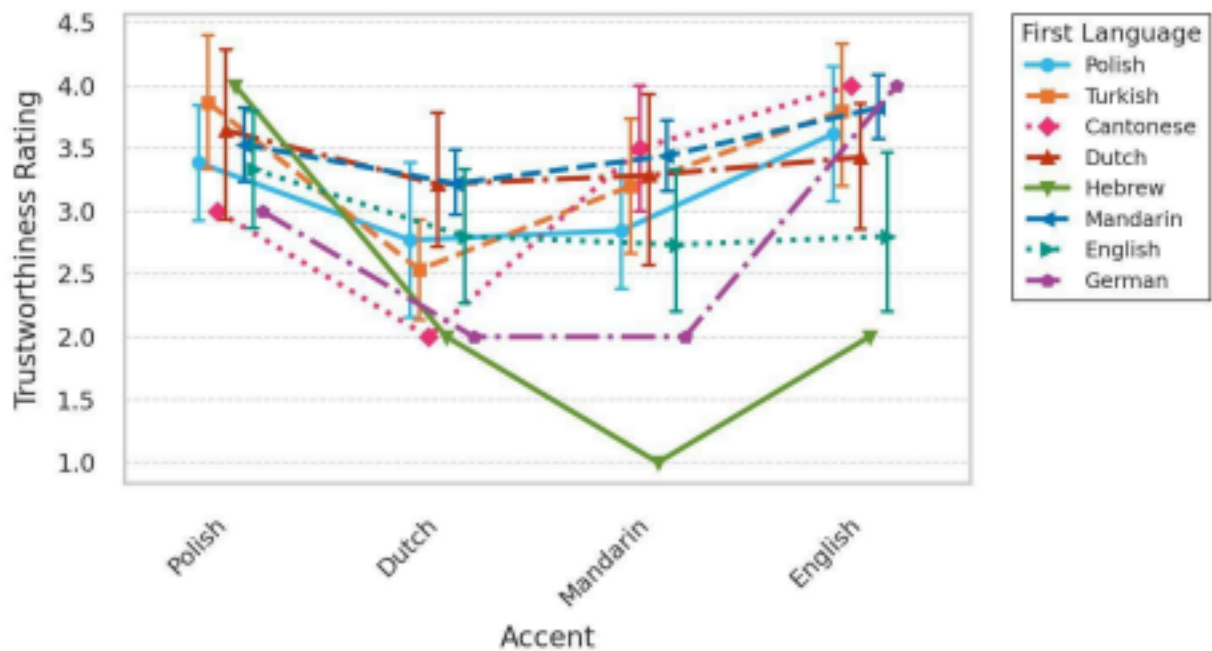
We generated synthetic speech stimuli using advanced AI-based TTS technology provided by Elevenlabs, producing voices in four distinct accents: Standard American English (native), Mandarin Chinese, Polish, and Dutch (Flemish). A total of 129 participants with eight L1 backgrounds rated these voices across standardized prompts using a 5-point Likert scale. Data were analyzed using Aligned Rank Transform (Wobbrock et al., 2011) and ANOVA to rationalize interactions between L1 and accent on pleasantness and trustworthiness ratings, with pairwise post-hoc tests identifying significant differences.

The findings indicate that listeners' L1 significantly influenced their ratings of pleasantness and trustworthiness, although the post-hoc test showed no significance for any specific accent, indicating that no single accent was universally preferred. Notably, native English-speaking participants rated the Standard American English voice lower than expected, likely due to an "uncanny valley" effect resulting from its lack of recognizable regional features. In contrast, non-native listeners rated the same voice positively, potentially associating it with perceived fluency and prestige.

Interaction Effect: L1 Background and Accent on Pleasantness Ratings



Interaction Effect: L1 Background and Accent on Trustworthiness Ratings



The results highlight the role of accent familiarity in shaping perceptions of synthetic speech, demonstrating the need for TTS systems to authentically represent regional linguistic identities. Designing voices that align with listener expectations may improve acceptance and inclusivity in speech-driven technologies. Further research could examine additional factors influencing listener perceptions, such as English proficiency levels and the ability to recognize specific accents.

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Conservative in Speech or Radically different? Written and Spoken Variation in Eastern Norway

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Abstract

Norwegian is characterized by variation, in both spoken and written form, and between and within varieties (Røyneland, 2009). There is no official spoken standard for Norwegian, but there are two official written standards, Bokmål and Nynorsk (Røyneland, 2009). Bokmål, the focus of this study, is the most widespread written standard and allows for variation in morphology and orthography (Fjeld, 2015; Haugan, 2024).

Officially, these variant forms within Bokmål, generally referred to as conservative and radical forms, can be used interchangeably (Fjeld, 2015). However, in practice, the use of these forms is more intricate and at least partially dependent on sociolinguistic factors (Fjeld, 2015). Additionally, the use of these forms differs between written and spoken production. For many speakers from central eastern Norway, Bokmål, and the variation within the written standard, lie relatively close to their spoken dialect (Røyneland, 2009). This study focuses on the relation between written, spoken and read Norwegian, in order to determine how these speakers interpret written texts and how this relates to their written and spoken input.

In this study participants are asked to read sentences written in Bokmål out loud; they are evaluated on their use of radical and conservative forms in contexts where the variables are either marked or unmarked. It is expected that the read sentences allow deviation from the written Bokmål and participants will pronounce variants that fit with their spoken dialect. In addition, the sentence's formality level is expected to affect the production of radical variants, with more radical forms in informal texts. This research project is currently ongoing, and we hope to present the final results at Tabu dag 2025.

Keywords: Norwegian, Bokmål, sociolinguistic variation, reading, speech

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Priming effects of English ‘they’ on non-binary pronouns in Dutch

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Abstract

In contrast to singular ‘they’ in English, a pronominal system for referring to non-binary people has not yet crystallised in Dutch. Previous research, for example Vriesendorp 2024, focuses on inclusivity-oriented speakers and finds that speakers predominantly use ‘die’ in subject positions, while showing more variation in non-subject positions between ‘die’ and ‘hen/hun’. Decock et al. 2024 finds that ‘die’ is much less conspicuous to Dutch speakers than ‘hen’ and ‘hun’. In ongoing work, we partially replicate Vriesendorp’s study with two additions: firstly, we use a broader participant base which also includes people skeptical of non-binary inclusion, and secondly, we elicit forms in both Dutch and English. By counterbalancing the order of languages, we can investigate a priming effect of English non-binary ‘they/them’ on Dutch pronoun production. Preliminary results suggest that the English-first participants produced more ‘die/diens’ forms in non-subject position compared to Dutch-first participants, suggesting a phonological connection between ‘they’ and ‘die’, rather than a grammatical/semantic connection between ‘they’ and ‘hen/hun’. No priming effect was found in subject positions, where ‘die’ was the dominant form in both groups, in accordance with Vriesendorp’s findings.

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Parallel session 5

When Silence Speaks: The Impact of Visual Cues in Real-time Ellipsis Resolution

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Abstract

While a substantial body of research shows that extralinguistic cues—such as vision—immediately impact language processing, the extent to which these cues can be utilized by the language system remains underexplored. The current study aims to delineate the capacity of extralinguistic cues (vision) to influence real-time language processing by testing whether the human language parser can use visual inputs in lieu of linguistic inputs to comprehend elliptical constructions. Ellipsis resolution has been one of the most hotly debated topics in theoretical as well as psycholinguistic literature for decades, due largely to its typological universality and ability to undermine the principle of semantic compositionality. A general consensus is that comprehenders require some form of syntactic antecedent to be stored in the working memory, which can later be utilized to fill the elliptical gap for successful interpretation. What if this syntactic antecedent is replaced with visual information such as an image depicting an action? Can comprehenders still integrate the visual cue with the unfolding linguistic information and resolve the ellipsis? Sixty L1 English readers viewed images depicting actions followed by sentences with elliptical gaps. Participants were first

shown a sentence fragment such as ‘Last Friday afternoon, Joanna was’, followed by an image of a woman knitting a scarf. Subsequently, a sentence with an elliptical gap was displayed “Elise was too because...”. Participants’ reading times at the ellipsis sites (“was too”) and spillover regions were compared to those of the controls to examine whether the elliptical resolution with a visual antecedent was successful. Preliminary analyses show that visually-situated processing of ellipsis appears to have some processing advantage over its linguistic counterpart—but surprisingly, not at the ellipsis region itself but rather at the subsequent spillover regions. The results may suggest that mental representations constructed multimodally are less cognitively taxing than purely linguistic representations.

Are 'each' and 'all' the same? A study on the development of universal quantifiers in Dutch

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Abstract

Different universal quantifiers evoke distinct meanings. Each enforces distributivity, meaning that the predicate separately applies to individuals (e.g., each pig flew to the moon means that each pig flew individually). All is non-distributive, so the predicate can also apply collectively (e.g., all pigs flew to the moon can mean that they flew together). Children must learn that multiple terms express universal quantification, with differences in distributivity. We studied this development: Do children initially treat all universal quantifiers the same before learning their differences? Or do they treat distributive quantifiers as distributive from the outset?

We examined Dutch-speaking children’s (age: 4;0-5;9, $n = 76$) understanding of the non-distributive universal quantifier *alle* and the distributive universal quantifiers *elk* and *ieder* in two tasks. In an act-out task, children moved toys based on prompts like *Nu gaan alle varkens naar de wei* (“Now, all pigs go to the field”). In a (truth-value) judgement task, children evaluated sentences like *Hier staan alle varkens in de wei* (“Here, all pigs are in the field”) against pictures. The quantifier varied across trials in both tasks. Both tasks suggest that children interpreted *alle* more often as a universal quantifier than *elk* and *ieder*.

These results suggest that non-distributive universal quantifiers are acquired before distributive ones. Possibly, children lack semantics of distributive *elk* and *ieder* (which are low-frequent terms). Alternatively, they may understand these terms as distributive operators, and struggle with their interpretation in our experiment. Over the coming months, we will conduct another act-out and judgement task in which we test children’s understanding of universal quantifiers in a distributive context. In these tasks, the context involves the separate distribution of objects to individuals (e.g., *Elk varken heeft hooi*; “Each pig has hay”). If children understand *elk* and *ieder* as distributive, their accuracy should improve in this context.

From Learning Styles to Learning Skills: The Interplay between English Language Learners’ Learning Styles and Their Performance in Receptive Language Skills

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Abstract

Recent developments in language education indicate that teaching methods are not the primary factors influencing success in language acquisition (Johnson, 2017). Instead, learners themselves are pivotal in shaping their educational experiences (Peacock, 2001). Data from numerous studies have indicated a significant role of how inseparably interwoven learning styles and learners’ performance in language learning. While a wealth of studies has explored the relationship between learning styles and language performance, there remains a gap regarding the effects of specific learning styles on skill development. This study aims to examine how individual learning styles

influence learners' success in skill-based assessments, particularly in reading and listening, which are classified as receptive language skills.

The research employs an explanatory mixed-method research design, wherein quantitative data were initially collected utilizing the Learning Style Survey developed by Cohen, Oxford, and Chi (2009). The Learning Style Survey was completed by 120 EFL students, evenly distributed across three academic levels: 40 at Level 1, 40 at Level 2, and 40 at Level 3. Participants were chosen using a random sampling method to ensure that the sample was representative and free from bias. After conducting a detailed quantitative data analysis and examining students' learning styles, we compared the proficiency exam results with these styles. The aim was to determine whether students who excelled in the reading and listening sections had particular learning styles. Those high-performing students were then invited to participate in the second part of the study to gather more in-depth information by employing semi-structured interviews.

The findings revealed a positive correlation between specific learning styles and proficiency in receptive skills, indicating that these learning styles contribute to successful language acquisition. The study offered insights into how instructors can adapt teaching strategies based on identified learning styles, potentially leading to more effective language instruction and improved student outcomes.

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Parallel session 6

Schade! Irony Production of Individuals with Congenital Amusia

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Abstract

Congenital amusia, a neurogenetic condition that affects rhythm and pitch processing in music (e.g., Ayotte et al., 2002), has been shown to also affect speech perception (e.g., Pfeifer, 2022). More specifically, individuals with congenital amusia struggle with intonation and duration processing (e.g., discriminating between questions and statements; Patel et al., 2008). Considering this, non-literal language could be a potential struggle for these individuals. Irony speech, for example, often makes use of pitch and rhythmic differences, among other social cues (e.g., Mauchand et al., 2020). The ironic tone of voice, one of its salient features, is often marked by a lower average pitch, less pitch variation, and a slower tempo (e.g., Niebuhr, 2014; Rockwell, 2000). As such, the present study looks into whether the production of ironic language by individuals with congenital amusia is created with the same prosodic cues typical of ironic speech.

In order to investigate this, 10 German individuals with congenital amusia have been asked to produce 38 sincere and 38 ironic utterances. These utterances contained three types of irony: ironic compliments, sarcastic irony, and one-word utterances, adapted from and inspired by Mauchand et al. (2020) and Nauke and Braun (2011). To analyze these utterances, a Praat script, created for a previous study (Querner & Pfeifer, in progress), is used to measure mean pitch, pitch variation, pitch range, and total duration.

It is hypothesized that individuals with congenital amusia will not display the most common prosodic cues that characterize the ironic tone of voice as they already show impaired speech perception (e.g., Pfeifer & Hamann, 2022). For this reason, these individuals are expected to use alternative strategies to express irony or fail to produce it entirely. This project is currently underway, but results are expected well before this conference.

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Noun and Verb Association in Individuals with Brain Tumours: A New Test in German

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Abstract

Introduction: The comparison between nouns and verbs has been the focus of extensive aphasiological research¹. Behavioural accounts suggest a dissociation between these word classes, while the distinction is not as clear-cut at the neural level. During an awake craniotomy, thorough mapping of language functions can lead to a reduction of postoperative deficits and an increase in resected volume of tumour tissue². Commonly used tasks, both in the context of a possible noun-verb dissociation and of awake brain surgery, are object and action naming tasks³. However, these production tasks are not sufficient to investigate language comprehension abilities⁴. Furthermore, while existing tasks assessing comprehension have already pointed towards a noun-verb dissociation⁵, they are not entirely suitable to detect milder impairments, such as those caused by a brain tumour. Consequently, new tests targeting language comprehension, both with nouns and with verbs, are needed to ensure thorough testing before, during, and after surgery.

Aims: To design a new association test assessing verb associations (e.g., kick-punch, kick-score) and compare it to a noun association test (e.g., dog-cat, dog-leash) in healthy people and in people with brain tumours.

Methods: 50 healthy participants and 5 individuals with brain tumours will participate. Two tests will be used: the new verb association and a noun association test⁶. The performance of the patients will then be compared to that of matched controls. This is work in progress for a Master's thesis.

Predictions: We predict all participants to perform worse in verb association compared to noun association. It is unclear whether the results may reach significance for the healthy group. We expect the patient group to be significantly more impaired than healthy controls in verb association. Furthermore, we predict a dissociation in behavioural measures between the noun and the verb test.

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The influence of the connector but on the processing of negation

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Abstract

Negated sentences have been shown to be more effortful to process than affirmative ones (e.g., Kaup et al., 2006). However, this finding is largely based on experiments in which negated sentences are presented in isolation, whereas these have been argued to depend on discourse context much more than their affirmative counterparts (Wason, 1972). This is evidenced by the fact that when a pragmatically felicitous context is provided, the heightened processing costs diminish (Dale & Duran, 2011).

These contexts, which can be created in various ways, can be strengthened by connectors, in turn adding onto an already facilitative context. Specifically, the connector *but* has the function of marking a violation of expectations explicitly (Knott & Sanders, 1998). Importantly, negation might likewise be used to express such a violation of expectations (Dimroth, 2010). Since both negation and this connector can bear a similar function, *but* might further ease the processing of negation.

In this planned study, we will investigate this hypothesis using the visual world eye-tracking paradigm with native speakers of Dutch. Experimental items consist of short contexts introducing a certain expectation (e.g., *The dog is very hungry and Felix has dog food...*). In the critical condition, these contexts are followed by a negated sentence introduced by *but* (... *But Felix does not feed the dog*). Compared to our baseline conditions (negated sentences not introduced by *but*, and affirmative sentences with and without *but*), we expect earlier looks to the target picture in our critical condition. Moreover, we hypothesise that, in this condition, participants look at the target immediately after the connector, before hearing the negation particle.

In sum, we expect to find a facilitation effect of *but* on the processing of negation, in line with previous findings. Additionally, *but* might show a predictive effect, with participants anticipating negation before hearing it.

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Parallel session 7

Verb Inflection in Parkinson's Disease: Performance under Pharmacological Intervention and Deep Brain Stimulation

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Abstract

Vocal fry, characterized by a low-frequency creaky voice quality, is a sociolinguistic marker in American English that often leads to negative perceptions of female speakers (Leung et al., 2021; Taylor et al., 2022). In Dutch, however, it functions primarily as a prosodic feature without such sociolinguistic connotations (Van Hugte & Heeren, 2024). This study examines whether Dutch listeners with English as a Second Language (ESL) exhibit gender-biased perceptions of vocal fry, as seen in native English speakers, considering cognitive load during second language processing affects sensitivity to paralinguistic features (Zhu & Aryadoust, 2022).

We hypothesize that while Dutch ESL listeners may show some gender bias in vocal fry perception due to exposure to American media, this bias will be less pronounced than among native English speakers due to cognitive resource allocation during L2 processing and the different linguistic status of vocal fry in Dutch.

Our methodology employs controlled speech samples from the People's Speech Dataset (Galvez et al., 2021), balanced for gender and vocal fry presence. Dutch advanced ESL speakers (C1 level) will rate speakers' confidence, professionalism, and trustworthiness on 5-points Likert scale. Using ordered logistic regression, we will analyze how speaker gender, vocal fry presence and listener gender influence perceptions, while controlling for English media exposure.

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Vocal motor control of pitch across age in adulthood

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Abstract

Purpose: Sensorimotor control of speech relies on perception and production working together to achieve fluent speech output. Perceptual mechanisms are responsible for detecting changes to our

speech (via auditory feedback) so we can make adjustments accordingly¹. Sudden, unexpected pitch changes in auditory feedback during speaking prompt a reflexive correction of vocal pitch (“pitch reflex”) in typical speakers that opposes the direction of the change². “Over-corrections” of the pitch reflex have been observed in older adults compared to younger adults, which suggest reduced vocal control³. However, it is not clear how sensorimotor control and perceptual acuity change together and separately with age in adulthood. Thus, the aims of the current work were to assess the following metrics across age in adulthood: (1) perceptual acuity to pitch; (2) vocal pitch shift reflex responses; (3) the relationship between acuity and pitch shift reflex responses.

Methods: A total of 120 native speakers of Italian (59 males, 61 females) aged 16 - 74 years old participated. All participants passed a hearing screening, performed a two-way forced-alternative perceptual pitch discrimination task, and a vocal pitch reflex task. In the pitch reflex task, participants vocalized into a microphone while wearing headphones and receiving real-time feedback of their voice +5 dB relative to the microphone for 56 trials. For 20% of the trials, their auditory feedback was shifted 1 semitone above their true vocal pitch. The magnitude of the responses to the vocal pitch shift reflex (in semitones) will be compared to the perceptual acuity for pitch (in semitones). The effect of age, sex, and singing experience will also be considered in the analyses.

Results and Discussion: Acuity data has been analysed for all 120 speakers. Pitch reflex analysis is ongoing. The final results and interpretations will be presented at the conference.

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Longitudinal assessment of articulatory-kinematic variability in individuals surgically treated for tongue cancer

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Abstract

Purpose: Tongue cancer is generally treated with surgical resection, which considerably alters the musculature of the tongue¹ and induces changes to the articulatory movements (i.e., kinematics) needed for speech.² Articulatory-kinematic data has shown that individuals treated for tongue squamous cell carcinoma (TSCC) have reduced tongue movement size compared to typical speakers.³ However, it is still unclear what strategies speakers may use to compensate for the

articulatory-kinematic constraints that result from altered tongue musculature post-surgery. To find the optimal compensatory strategy, individuals treated for TSCC may explore the available motor space and show increased tongue movement variability in the short term. Increased movement variability is thought to be beneficial for motor learning (i.e., acquiring new movement patterns through practice).⁴In the long term, tongue movement variability could also increase due to reduced motor control caused by changes in tongue musculature. The proposed study aims to examine longitudinal changes in sentence and gesture-level articulatory-kinematic (i.e., tongue movement) variability in individuals treated for TSCC.

Methods: Articulatory-kinematic data was collected using electromagnetic articulography from twelve individuals with TSCC at four different time points (pre-surgery and 6-, 12-, and 18 months post-surgery) and from eleven sex- and age-matched controls. Articulatory-kinematic variability is measured on the sentence level via the spatiotemporal index (STI) and on the gesture level via the kinematic endpoint variability. Both measures will be calculated from the vertical displacement of the tongue tip sensor, following procedures described in prior work.^{5,6} **Expected results:** Data analysis is still ongoing, but the final results will be presented at the conference. The results will shed light on the long-term speech outcomes following TSCC surgery, and on the mechanisms underlying the formation of compensatory strategies.

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Platform-mediated affinity space: Situated Identity Construction and Compliance Strategies in Companion Service

Xuedi Han, Erika Darics, Janet Fuller, Gisela Redeker

Abstract

Companion services are redefining the intersection of intimacy and labor in the digital age. Companions are service providers who lease out their time, skills, and expertise to fulfill both the practical and emotional needs of the consumers. They receive compensation for their services. While prior research has examined how companions negotiate personal and professional identities, this study shifts focus to situated identity (Alexander & Lauderdale, 1977), how companions adapt the self-presentation to platform-specific norms and regulatory constraints dynamically. We analyzed 50 companion advertisements on Red Note, a UGC platform with covert commerce, to investigate the strategies the companions use to tailor their identity performances. We use situated identity theory, meta-discourse analysis and critical genre analysis as our analytical tool, and identify three strategies: platform-driven formatting, compliance labor, and intertextual legitimacy that they use to make their companion identity align with platform affordances (e.g., hashtags, emojis) and societal expectations (e.g., "green service" disclaimers). This study reveals that companions present a situated identity that strategically balances commercial aim and platform compliance. This study advances understanding of digital identity construction under the gig economy, and shows how digital platforms mediate gig labor practices and regulations.

Environmental Influences on Children's Communicative Behaviour: A Multimodal Semiotic Perspective

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Abstract

This study investigates the influence of environmental factors on children's communicative behaviour through a multimodal semiotic framework. It examines how contextual variables - such as audience awareness, interlocutor familiarity, and material surroundings - shape children's verbal and non-verbal communicative expression. By analyzing both spontaneous and controlled communicative settings, the study aims to determine how external conditions affect linguistic choices, reasoning processes, and multimodal strategies in child communication.

The central research question guiding this study is: How do different modes (verbal speech, environment, and material objects) influence children's communicative behavior in both naturalistic and controlled settings? The research does not seek to establish direct correlations between datasets but rather to identify recurring modal mechanisms that manifest across different communicative environments.

To address this question, the study follows a mixed-methods approach, integrating corpus analysis of TV interviews with a controlled experimental study conducted in a primary school. The first dataset provides insights into how children engage in structured media interactions, while the second introduces systematically varied conditions (e.g., changes in interviewer identity, setting, and recording awareness) to examine causal effects on speech behaviour. This combination of observational and experimental data was chosen to ensure a comprehensive analysis, capturing both naturally occurring communicative tendencies and controlled linguistic variations, allowing for a deeper understanding of modality-driven speech adaptation.

The findings will contribute to linguistic models of child speech development, offering insights into how multimodal and social factors shape communication. The study aims to enhance theoretical frameworks in multimodal semiotics and child language acquisition, while also informing educational and media-based approaches to studying children's speech in diverse communicative settings.

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Poster Sessions

Poster Session A

Productivity in morphosyntax: A systematic literature review

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Abstract

Productivity is a highly complex and multifaceted concept in linguistics, with varying definitions and measurement approaches across different subfields. This poster presents the methodology of our ongoing systematic literature review, which aims to clarify how productivity has been conceptualized and assessed in linguistic research. Many have noted the term's ambiguity (e.g., Aronoff, 1976; Barðdal, 2008), and our review seeks to provide a structured synthesis of existing studies.

Our methodology follows a systematic approach to ensure a comprehensive and unbiased examination of the literature. We began by defining clear inclusion and exclusion criteria, focusing on peer-reviewed studies that explicitly address linguistic productivity. Our search strategy involved multiple academic databases, using controlled vocabulary and keyword combinations. We then applied a screening process, first reviewing abstracts and then conducting full-text assessments to ensure relevance. Data extraction focused on key themes such as operationalizations of productivity, methodologies used, and theoretical frameworks.

In this poster, we outline our research design, data collection process, and preliminary observations regarding trends in productivity research. We also discuss challenges encountered in synthesizing diverse methodologies, as well as the implications of these differences for linguistic theory and empirical research. By presenting our systematic approach, we aim to foster discussion on best practices for conducting literature reviews in linguistics and invite feedback on our methodology before finalizing our findings. This presentation serves as both a roadmap for our ongoing research and an opportunity for scholarly engagement on the complexities of linguistic productivity and its study.

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Uncovering macro and micro creative process in subtitling using machine translation

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Abstract

The growing demand for multilingual audiovisual content challenges the subtitling industry. While studies show neural and statistical machine translation can boost subtitling productivity (Etchegoyhen et al., 2014; Matusov et al., 2019), they often fail to account for the differences in how machine translation (MT) and human translators solve specific problems in the source text that

require a high degree of creativity (Guerberof-Arenas & Toral, 2020 and 2022). This PhD research, part of Guerberof-Arenas' EU-funded INCREC1 project, comprises two work packages (WP). We will present the project's experimental design and preliminary WP1 results.

First, WP1 involves defining what creative process means for subtitlers and developing a framework of creative stages in subtitling. It is conducted with ten subtitlers translating from English to Dutch and eleven from English to Spanish. The study involves subtitling a 15-minute sitcom script with high creative content, during which participants documented their experiences in diaries. After the translation task, in-depth interviews were conducted to explore this creative process (Botella et al., 2019; Guerberof-Arenas & Toral, 2022). Finally, we create a framework of creative stages in audiovisual translation.

WP2 examines the micro-processes involved in subtitling. Our investigation has three primary objectives: First, we aim to identify and categorise translational challenges by focusing on units of creative potential (UCPs)—the units in original text that require translators to use problem-solving skills (Bayer-Hohenwarter, 2012; Guerberof-Arenas & Toral, 2020). Second, we employ eye-tracking technology combined with retrospective think-aloud protocols to compare subtitlers' cognitive load in different conditions—translating without MT, having MT visible as a proposal, and receiving MT only on demand. Finally, we conduct comparative analyses of processing time per subtitle frame and per word when translators handle UCPs versus regular units, thereby exploring productivity within the context of creative translation outcomes.

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When AI Talks About Nature: Ideological Bias in ChatGPT's Environment Discourse across Priming Conditions

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Abstract

Biodiversity conservation is a global imperative, yet polarised debates over balancing economic priorities and ecological protection persist. Large language models (LLMs) like ChatGPT increasingly shape public discourse, raising concerns that they may reinforce ideological divisions through biased responses (Kaneko et al., 2024). While previous studies have examined LLM biases in gender, race, and politics, no research has systematically investigated the influence of prompt priming on LLM outputs in biodiversity-related discussion.

This study investigates the extent to which ChatGPT-generated responses reflect or amplify political and ideological biases in biodiversity-related discussions by testing the influence of prompt priming. Drawing on studies by Motoki et al. (2023) and Bang et al. (2024), which investigate political bias, this study employs the established 24-item Likert scale brief Environmental Attitudes Inventory (EAI) (Milfont & Duckitt, 2010) alongside open-ended questions adapted from the brief EAI. I compare responses generated under five conditions using a dose-response approach: unprimed and impersonating someone with “left”, “right”, “extreme left”, “extreme right” view, employing repeat sampling to reduce the influence of randomness in LLM output by performing two tests 100 times for each mode. Data collection is done interfacing with the ChatGPT application programming interface and analyses are conducted in R. I use content, sentiment, and keyword frequency analyses to detect biases and variations in sentiment, word choice, and framing, paying particular attention to the effects of prompt priming.

By comparing politically primed and unprimed responses, this study seeks to uncover patterns of bias and potential amplification of polarised viewpoints in LLM-generated content. The findings contribute to the broader discussions on the role of artificial intelligence in public, political and environmental discourse, highlighting implications for policymakers, media, and ethical deployment of LLMs in biodiversity-related discussion.

Keywords

Computational Linguistics, Statistical Analysis, Large language models, ChatGPT, Bias, Prompt Priming, Sustainability, Biodiversity Conservation, Environmental attitudes, Environmental attitudes inventory, Environmental concern

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Thematic and Taxonomic Verb Relations in Individuals with Brain Tumors: A New Language Task in German

Manon Winkler, Madeline Philipsen, Lena Rybka, Julia Onken, Peter Vajkoczy, Thomas Picht, Adrià Rofes

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Abstract

Introduction: Individuals with brain tumors may experience language deficits after awake brain surgery, such as an impaired semantic system¹ and comprehension problems². Object naming is a standard task in intraoperative mapping², but research indicates a behavioral and neural dissociation between nouns and verbs³. A new test that includes verbs and assesses the semantic system more in-depth may be needed to improve postoperative outcomes. Thematic (e.g., dog – leash, singing – dancing) and taxonomic (e.g., dog – bear, cutting – sawing) relations offer promising insights into the semantic system, as these relations are processed differently in terms of reaction times and neural correlates^{4,5}.

Aim: The goal is to develop and validate a verb association task suitable for awake brain surgery and to assess differences regarding semantic verb relations between individuals with brain tumors and healthy controls.

Intended Methods: This is an ongoing project for a master's thesis. We expect to have data from at least five individuals with brain tumors and five healthy controls by the time of the conference. The performance of thematic versus taxonomic relations within and between groups will be compared using group and single-case statistics.

Expected Results: Individuals with brain tumors will perform worse than healthy controls in the verb association test. Participants with and without brain tumors will perform worse in taxonomic compared to thematic verb relations.

Relevance: The new test may complement existing language tests, improving current assessment procedures in awake surgery. Moreover, it will provide deeper insights into behavioral differences and the neural distribution of thematic and taxonomic relations.

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Pre-frication in velar and uvular stops: acoustics and variability

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Abstract

We investigate acoustic properties and variability of fricative noise before the closure of

voiceless velar and uvular stops in three not typologically-related languages: Chukchi (Chukotko-Kamchatkan; Glottocode: chuk1273), Mehweb (East Caucasian; mege1234), and Shughni (Southeastern Iranian < Indo-European; shug1248). In our data, [k] and [q] are present after various vowels as well as after some consonants. We refer to the investigated phenomena as pre-frication of stops.

Dorsal consonants are lenited more often than obstruents of other places of articulation (Lavoie, 2001). The acoustic features indicating phonological strength of dorsal stops are number of bursts, intensity of the fricative noise during post-burst release, and absence of full closure. In our data, we detected noise before the closure which can be described as a part of lenition process and, as we show here, functions differently in velars and uvulars. To investigate the properties of pre-frication, we conduct several acoustic measures including absolute and relative duration of pre-frication, ZCR, and the spectral peak on frequency band 0,5-7 kHz following the approach of Shadle (2023).

Our results show that the three languages show similar patterns: In all the languages investigated, pre-frication appears frequently before uvulars, while before velars it occurs only in some positions in Chukchi; pre-frication in uvulars has longer duration compared to velars. The quality of pre-frication varies: spectral peak can have same values as F2 of the previous vowel, the main spectral peak of the burst of the stop, have values different than that of previous vowel and burst; the pre-frication can contain bursts. Before both velars and uvulars, the pre-frication tends to appear after front vowels more frequently than in other environments.

Our data suggests that the pre-frication is associated with uvulars more than velars and thus can be considered as one of the acoustic cues differentiating between velars and uvulars.

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Silent but Not Still: A Multimodal Analysis of Muscle Activation and Physiological Responses to Poetry and Prose Reading

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Abstract

Previous studies have shown that subvocalization plays a crucial role in reading comprehension, involving movements in speech muscles that aid in phonological processing and memory retention. Research on poetry has highlighted its unique impact on cognitive and emotional processing, with rhythmic and metrical structures influencing eye movements during silent reading (Beck & Konieczny, 2021). However, there remains a gap in understanding how muscle activation and physiological responses specifically differ between reading poetry and prose, hence the need for a comprehensive investigation into these embodied responses. Our main research question is: Do muscle activation and physiological responses during silent reading differ when individuals read poetry versus prose, and if so, how do these differences reflect variations in reading objectives and genre expectations?

We will use a within-subject design, where participants aged 18-40 read two poems in German, presented in both original and prose-like forms, using three reading models: silently, mouthing, and aloud. Electromyography (EMG) signals from speech articulator muscles (using sensors) and physiological data from EmbracePlus device will be analyzed to assess muscle activation and physiological responses. Electromyography (EMG) measures the electrical activity generated in muscles by using sensors (Kallenberg & Hermens, 2006). The EmbracePlus device, which is a smartwatch placed on the wrist, provides insights into electrodermal activity (EDA, a measure of stress or emotional responses) and pulse rate, offering a comprehensive view of embodied response to different reading materials.

Data collection is ongoing but will be completed by 31 May 2025. However, we hypothesize that for muscle activations, poetry will elicit higher EMG signals compared to prose due to its rhythmic and metrical structures, which may require more pronounced subvocalization. Additionally, we expect that reading poetry will result in increased EDA and possibly higher pulse rates, reflecting heightened emotional engagement and cognitive effort associated with processing poetic structures.

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Contrastive-Learning-Based Siamese Network for Multimodal Sarcasm Detection

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Abstract

Sarcasm is a complex linguistic phenomenon where the intended meaning contrasts with the literal expression (Joshi et al., 2020). For example, saying “What wonderful weather!” during a thunderstorm conveys frustration rather than praise. In daily life, using sarcasm allows us to express dissatisfaction while adhering to social norms.

Misinterpreting sarcasm can negatively impact sentiment analysis, human-computer

interaction, and social media moderation. Integrating sarcasm detection into speech technology is a critical step toward advancing human-centred human-machine interaction, helping machines grasp the intricacies of human communication (Gao et al., 2022).

Schifanella et al. (2016) found that text-based models often misclassify sarcastic statements when they lack contextual information. However, existing methods have not fully exploited Siamese networks, which have demonstrated strong performance in emotion recognition tasks by leveraging metric learning to enhance classification accuracy (Gendron & Guibon, 2024). To address this gap, this study proposes a contrastive-learning-based Siamese network for multimodal sarcasm detection.

To model the relationships between multimodal inputs, we employ a Siamese network, which captures the similarity and subtle distinctions between sarcastic and non-sarcastic expressions. The network processes paired samples, learning fine-grained differences, while contrastive learning enhances feature separation. We integrate text, speech, and visual features. Evaluations on MUSTARD++ (Ray et al., 2022) and a proprietary Mandarin Chinese sarcasm dataset (under review) assess cross-linguistic generalization. Using SVM as the baseline, our proposed method has increased the performance of sarcasm detection. Results will be shared during the conference presentation.

Most existing research focuses on sarcasm in English speech, leaving a gap in tonal languages like Mandarin. This study bridges that gap by offering new insights into cross-lingual sarcasm detection, demonstrating how sarcasm varies across different linguistic and cultural contexts. Additionally, this research contributes to the technical advancement of sarcasm detection, paving the way for more sophisticated machine learning models that enhance multimodal sarcasm recognition.

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Radicards: A Board Game for Learning Chinese Characters

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Abstract

Chinese has a logographic script wherein characters are the basic unit. Due to their visual complexity, Chinese characters pose unique challenges for learners. However, they follow internal compositional rules. Approximately 90% of characters are classified as ideophonic compounds, in which a semantic radical conveys meaning and a phonetic radical indicates pronunciation, and most radicals have positional regularities (Brunswick et al., 2010; McBride et al., 2018; Xu et al., 2019; Zhang et al., 2023). Radicards is an innovative card game designed to simplify character acquisition by leveraging the internal compositional logic of Chinese characters. Originally developed for children with developmental dyslexia, the game's mechanics align with research on visual-spatial and orthographic processing in Chinese (Liu et al., 2018; Yang et al., 2021), making it effective for a broader audience, including young native learners, second language learners, educators, and literacy programs.

The game combines UNO-like mechanics with character formation, where players use cards depicting semantic radicals (yellow) and phonetic radicals (blue) to form valid characters. Players take turns pairing radicals, pronouncing characters aloud, and utilizing function cards (e.g., Reverse, Wild, Swap) to enhance engagement. Design Principles—color-coding, positional cues (arrows indicating radical placement), and answer sheets—align with literacy research, emphasizing radical awareness, morphological analysis, and analogical reasoning (Ho et al., 2003; McBride et al., 2018). By composing characters via radicals, Radicards fosters metalinguistic skills critical for recognizing patterns in character construction, such as how shared phonetic radicals cue pronunciation (e.g., 青 in 清, 晴) or semantic radicals indicate meaning categories (e.g., 氵 for water-related characters).

Radicards is a versatile learning tool that integrates gamification with orthographic processing research and educational theories, supporting use in classrooms, homes, and clinical therapy. It reduces literacy anxiety and enhances orthographic processing through visual-spatial training, making Chinese character learning interactive and accessible.

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Poster Session B

The Influence of Proficiency and Word Type on Dutch-Japanese Learners: A Picture Naming Task
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Abstract

Introduction: Research employing the picture naming paradigm has identified several factors that influence code-switching, including lexical frequency (Mousikou & Rastle, 2015), visual cues (Hartsuiker, 2015), and cultural bias (Li et al., 2013), and language proficiency (Cai et al., 2021). Several theoretical models deal with word categories and speakers' behavior. The Revised Hierarchical Model (RHM) (Kroll and Stewart, 1994) suggests that L2 has a stronger lexical connection with L1, predicting faster naming for loanwords. In contrast, the Competition Model (CM) argues that loanwords increase lexical competition, slowing reaction time. This raises uncertainty about whether word category speeds up or slows naming. Mastery of long vowels (chōon) is crucial in Japanese, as seen in distinctions like biru ('building') vs. biiru ('beer'). Previous studies show L2 proficiency influences native-like pronunciation. (Altın et al., 2022; Cai et al., 2021; Colzato et al., 2008; de Leeuw et al., 2021; Gorba & Cebrian, 2021; Yazawa et al., 2023). This study examines two questions: (1) Do Dutch speakers name loanwords faster in Japanese? (2) How does L2 proficiency affect long vowel duration and pronunciation ratings? RHM predicts faster loanword naming due to shared concept representation, while CM suggests slower times due to lexical competition. For L2 proficiency, the study hypothesizes that higher proficiency leads to longer vowel duration but lower pronunciation ratings.

Methodology: This study recruited 10 Dutch-native, Japanese-L2 speakers (5 high and 5 low proficiency) with no hearing impairments. Exclusion criteria included hesitations over 1 second, incorrect responses, or multiple naming attempts. Stimuli included 24 pictures, 12 of which were loanwords. Participants completed a formal test (6 pictures × 4 blocks) and a language background questionnaire. Additionally, two native Japanese speakers (one male, one female) rated 240 audio files on a 0–7 foreign accent scale.

Results: Data analysis was conducted in R using ggplot for visualization. As shown in Figure 1, onset time varied by word type, with loanwords produced slightly slower than non-loanwords. However, the linear mixed model found no significant word category effect ($SE = 0.037$, $t(21.92) = -1.62$, $p =$

.12). Figures 2 and 3 illustrate differences in duration and rating scores. Median (high) and Median (low) were similar, with a narrower Interquartile Range (high). For rating scores (Figure 3), Median (high) < Median (low), with a narrower Interquartile Range (high). The linear mixed model found no significant effect of language proficiency on duration ($p = .325$) but did find a significant effect on rating scores ($\eta^2 = 0.68$, $SE = 0.31$, $t(106.12) = 2.18$, $p = .032$).

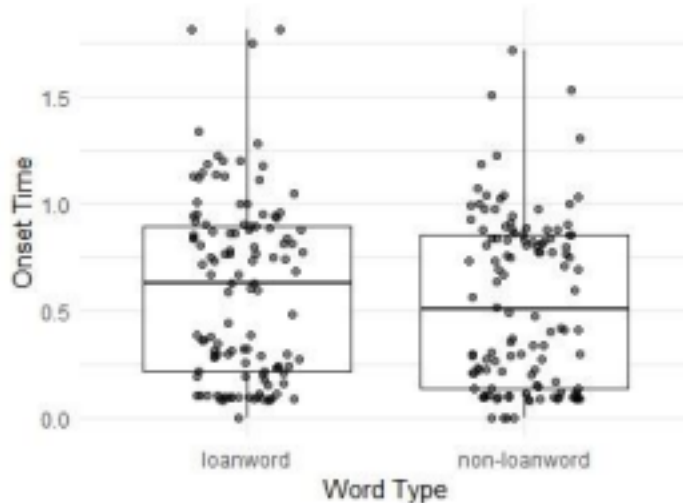


Figure 1. Onset time by word type

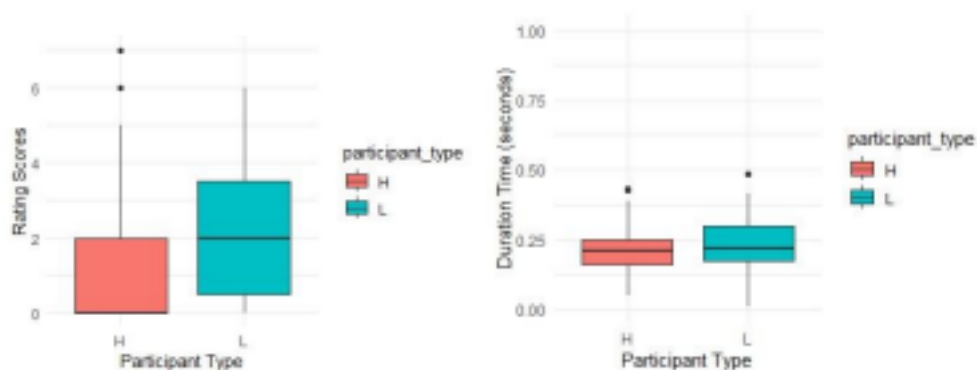


Figure 2. Duration time by participant type Figure 3. Rating scores by participant type

Conclusions: Experiment 1 examined word category effects on speech onset time, finding that L2 speakers named loanwords more slowly, supporting the Competition Model over RHM. No significant word category effect was found for Dutch-Japanese speakers. Experiment 2 explored L2 proficiency effects on foreign accents using both subjective (rating) and objective (duration) methods. Ratings showed a significant effect, while duration did not, indicating that L2 proficiency influences foreign accents depending on the assessment method. These findings align with previous studies. Future research should include more participants, additional stimuli, and inter-rater agreement analysis.

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Lost in Machine Translations? Reception of MT-mediated texts across languages and genres

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Abstract

Machine translation is increasingly used, with the publishing industry even experimenting with its use for literary translation. However, little research is done on the effects of MT mediated literary texts on readers. Our previous study—using an English-to-Dutch literary sci-fi short story—found

that readers experienced lower engagement and immersion in machine translation (MT) and even in post-editing (PE) compared to human translation (HT), which was particularly pronounced in creative and style-heavy segments.

Building on these findings, we expand our research across multiple languages and genres. MT quality differs significantly depending on the source and the target language,² and it has been hypothesised that the readerly impact of MT-mediated texts differs across genres: so-called ‘genre-fiction’, typically with action-driven narrative, might be less affected by MT than ‘high’ literature, which relies more on stylistic details.³ We use four language combinations with two source and target languages—Russian and English as source, and Dutch and Catalan as target—across three genres: literary short stories, poems, and thrillers.

Our study explores how readers engage with MT-mediated texts across language combinations and genres, focusing specifically on creative segments crucial to literary experience. Our novel methodology combines established reader engagement metrics (cognitive effort, emotional affect, and conscious reflection) through eye-tracking, emotion questionnaires, and retrospective interviews.

By examining the effect of MT-mediated texts on reader engagement across creative segments, languages and genres, this study offers new insights into an underexplored area. Our multifaceted methodology allows for a nuanced analyses of how readers interact with different forms of translated literature. Furthermore, our findings offer valuable insights not only for the publishing industry, but also for the development of MT systems, helping to assess where and how MT can be used successfully and where improvements are needed.

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‘Give Me the Textbook, but It’s No Help’: Exploring LLMs’ Ability to Leverage Relevant Context for Question-Answering

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Abstract

Recent advancements in Computational Linguistics have led to the creation of powerful generative Large Language Models (LLMs) that incorporate large amounts of knowledge as a byproduct of their language modelling objective. In the field of education, the various capabilities that LLMs have out-of-the-box present many (seemingly) low-hanging fruit, ranging from personalised tutoring systems to field-testing examinations (both of which are generally otherwise inaccessible). A subset

of these applications, such as examination field-testing, rely on the LLMs' ability to model student behaviour. Promising results have been achieved in this direction, where we demonstrated that LLMs' uncertainty signals can be leveraged to predict how well a student cohort will do in an examination [3, 2]. While these findings suggest that LLM' and students' behaviour can be similar, it is also known that LLMs and humans respond differently to, for example, choice-order perturbations when responding to opinion surveys [1]. As a next step towards understanding how LLM behaviour can be used to model student behaviour, we conduct a series of open-book question-answering experiments in which we manipulate the type of additional context provided (e.g., general encyclopedia or question-specific context) as well as the presentation order (e.g., providing the context before or after the question). Preliminary findings suggest that LLMs often cannot exploit useful context, especially when the answer is not directly present in the provided context. Surprisingly, we also find that providing additional context can sometimes cause an LLM to answer a question incorrectly – one it would have otherwise answered correctly. Looking at the broader picture, our preliminary research suggests that while a great deal of knowledge is embedded within LLMs, they cannot consistently extract relevant information from additional context.

Related Work

[1] Lindia Tjuatja et al. *Do LLMs exhibit human-like response biases? A case study in survey design*. 2024. arXiv: 2311.04076 [cs.CL].

[2] Leonidas Zotos, Hedderik van Rijn, and Malvina Nissim. *Are You Doubtful? Oh, It Might Be Difficult Then! Exploring the Use of Model Uncertainty for Question Difficulty Estimation*. 2024. arXiv: 2412.11831 [cs.CL]. URL: <https://arxiv.org/abs/2412.11831>.

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Persuade me if you can: Computational analysis of emotions and argumentation in online persuasive Reddit discourse

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Abstract

Persuasive language shapes everything from courtroom verdicts to casual online debates, influencing everyday decisions on seemingly trivial topics like the "best" cereal brand (e.g., Dutta et al., 2020; Eemeren et al., 2014). Despite its pervasiveness, little is known about the precise argumentative and rhetorical strategies that maximize persuasive success in everyday discourse. Moreover, quantifying degrees of persuasion in the wild has remained an ongoing challenge.

This study takes a novel computational corpus linguistic approach to analyzing persuasion by leveraging data from r/ChangeMyView (CMV), a Reddit platform where users explicitly 'mark' successful persuasive arguments. In CMV, when a commenter successfully changes the original poster's mind, they receive a Delta (Δ) badge for their comment (e.g., Tan et al., 2016). Utilizing this feature, we compiled a dataset of persuasive (Δ) comments, and an equal amount of word-matched

non-persuasive (no_Δ) comments. These corpora were then analyzed in two ways, they were a) annotated for argument substance (see Wagemans, 2021; 2019), using an innovative persona-specific trained AI chatbot, and b) coded for emotional appeal through sentiment polarity scores determined by VADER (Hutto & Gilbert, 2014).

A total of 122 comments were examined for persuasion (yes or no), sentiment (-1 to +1), and argument substance (e.g., FF, PF, etc.), with early comparisons revealing key trends. Preliminary results suggest that in online argumentative discourse, value-fact (VF) arguments are more common than policy-fact (PF) and fact-fact (FF) arguments. Additionally, in persuasive online argumentative discourse, negative sentiment arguments are more prevalent than positive sentiment arguments – positing that an appeal to negative emotions is more persuasive. The findings provide support for existing theoretical frameworks on emotions, persuasion, and argumentation.

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Covering Under-represented Perspectives from Cultural Heritage Data Using a Neuro-symbolic Approach

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Abstract

Reconstruction of the past happens via evidence, which can be in multiple forms such as historical newspapers, autobiographical writings and literary books. Cultural Heritage (CH) institutions offer a considerable amount of such data in digitized formats. This data serves as recorded history, corresponding to events which occur through time. Accessing and processing this data makes it possible to better understand past times. Coupling CH data with artificial intelligence (AI) methods through large language models (LLMs) gives rise to amazing opportunities when reconstructing the past from different perspectives. But, recorded history is not always impartial. Perspectives are often excluded due to biases, politics and religion. When trying to uncover such under-represented perspectives, often corresponding to marginalized communities, the related CH data is sparse and has a long-tail distribution. This makes uncovering such perspectives complicated. However, exploring multiple perspectives can be valuable (Brett et al., 2009; McCully, 2012; Goldberg and Ron, 2014; Goldberg and Savenije, 2018) in many ways: develop a more critical understanding of the past, understand the roots of modern sociocultural inequalities, and restore misinterpreted and incorrect stories.

Recent advances in AI show that it is possible for pre-trained LLMs to analyze features and extract information encoded in small and sparse amounts of textual data. This is done through transfer learning techniques, such as zero-shot (Petroni et al., 2019; Wei et al., 2023; Zhou et al., 2024) and few-shot (Brown et al., 2020), and knowledge injection (Baek et al., 2023, Pan et al., 2023) through knowledge graphs from various sources to prevent hallucination (Ji et al., 2023; Dahl et al., 2024). We outline an approach to uncover under-represented perspectives in given sparse CH data: a neuro-symbolic, multi-turn question-answer (QA) approach (Wei et al., 2022) constructed through transfer learning, natural language processing (Blessing and Kuhn, 2014; Provatorova et al., 2024; Verkijk and Vossen, 2023) and knowledge representation techniques (Hu et al., 2018; Aghaei et al., 2022). The truthfulness of these uncovered perspectives is preserved by providing explicit knowledge representation and improving data recall while reasoning is made more coherent through multi-turn QA. Further research can also be done to evaluate how historically valid these uncovered perspectives are by conducting qualitative analyses involving experts in the CH domain.

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Speech Waves: Determining functionally-relevant neural oscillations for vocal tremor

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Abstract

Background: Neural oscillations are crucial for coordinating motor action, including speech. In Parkinson's disease (PD), abnormal neural oscillations relate to bodily tremors¹. While dopaminergic medication alleviates extremity tremors in PD, medications and therapies have minimal impact on vocal tremor symptoms². Transcranial alternating current stimulation (tACS), a non-invasive neuromodulation method, can modify neural oscillations using low-intensity currents³. Modulating these oscillations has been shown to reduce hand tremors in tremor-dominant PD⁴. Research suggests high tACS intensities increase neural oscillations, while lower intensities decrease them^{5,6}.

Objective: The primary objective is to assess if tACS can modulate vocal vibrato in typical speakers. Vibrato will be used as a typical model for pathological vocal tremors, as they stem from the same underlying control mechanism⁷. We hypothesize that intensities below 2 mA will increase vibrato variability (reduce tremor), while intensities above 2 mA will decrease variability (increase tremor). A secondary objective is to explore individual variability in tACS response across intensities, informing personalized treatments for vocal tremor.

Methods: Ten typical speakers with self-reported vocal vibrato ability will participate. After passing a hearing screening, participants will produce vibrato vocalizations in a sound-attenuated booth while receiving tACS targeting the auditory cortex. Three tACS intensities (1-3 mA) will be tested and compared to a placebo or sham condition. tACS frequency will match individual vibrato frequency, and vibrato variability will be measured using Praat software⁸. Changes in vibrato from

baseline will determine the stimulation effect, and statistical analyses will compare vibrato variability across conditions.

Results: Data collection will begin in March and end in May, with final results available by TABU Dag.

Conclusion: This study investigates the potential of tACS in modulating vibrato variability, offering insights into speech motor control and neuromodulation; a first step towards approaches to reduce vocal tremor in PD.

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When Right Is All You Left: Improving Predictability Of Aphasia Recovery Outcome By Targeting The Contra-Lesional White Matter Tracts

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Abstract

Research on aphasia recovery has predominantly focused on the left lesioned hemisphere, as it is the dominant region for language functions (Thiebaut de Schotten & Forkel, 2024). Emerging evidence indicates that the right hemispheric structure, particularly its white matter tracts, plays a significant role in longitudinal aphasia severity (Forkel et al., 2014). As reviewed by Liu et al.

(2024), several studies have highlighted treatment-induced neuroplasticity changes in white matter tracts correlated to improved linguistic measures. However, the research on right hemisphere-assisted recovery does not consider the lesion site at the white matter tracts. Stockert et al. (2020) underscored that the functional recruitment from the contra-lesional homologues was only observed in patients with frontal lesions. Therefore, this preliminary study aims to enhance the predictive power of post-stroke aphasia (PSA) recovery by clustering the lesional tracts in the left hemisphere and correlating them to the contra-lesional homologues and behavioral measures using tractography and diffusivity analysis.

The study will involve a retrospective analysis of a database comprising 20 patients with PSA. The database includes demographic information such as sex, age, stroke date, months post-onset, scan date, and scores from the Western Aphasia Battery Repetition subtest. Tractography will focus on white matter tracts previously associated with PSA recovery, including the arcuate fasciculus (AF), uncinate fasciculus (UF), frontal aslant tract (FAT), superior longitudinal fasciculus (SLF), and corticospinal tract (CST; Breier et al., 2011; Olive et al., 2023; Rosso et al., 2014; Sihvonen et al., 2024; Soliman et al., 2021; van Hees et al., 2014; Wan et al., 2014, 2023).

Given the limited availability of repetition scores as the behavioral dependent variable, the study anticipates either null results or significance only in tracts associated with verbal repetition. Despite this limitation, the study aims to provide foundational insights into the neuroplasticity of contra-lesional white matter tracts in individuals with PSA, contributing to a broader understanding of recovery mechanisms in aphasia.

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Giving a voice to the homeless: the street papers of Italy

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Abstract

The common goal of street papers worldwide is to give a voice to the “invisibles”, to homeless people. Through the articles, they can tell their stories and express their opinions about everything that has to do with homelessness and housing problems. This research, from which part of the results will be presented, aims to clarify in what ways Italian street papers give a voice to the homeless (and to other people): Where are their voices displayed? How are they expressed from a linguistic point of view? More precisely, the goal is to describe — by making use of the most current theories and concepts in text linguistics — the linguistic structures through which the authors of the street papers choose to represent the words and/or points of view of the homeless. In other words, this research carries out an analysis regarding the polyphonic phenomena that can be found in the street papers' articles (Bakhtin, 1984; Ducrot, 1980; Ferrari & Lala & Pecorari, 2024). The analysis, that takes into consideration editions of all 7 existing Italian street papers, will be of qualitative nature for the most part. Instead, a quantitative analysis is carried out for one specific polyphonic phenomenon, namely, discourse reporting (Calaresu, 2004). In this way, it will become clear which type of reporting is used most frequently for the various voices within the street papers. The aim is to then explain for which communicative, varietistic, social, political and/or ideological reasons those types of reporting are chosen by the authors.

To my knowledge, no prior linguistic research has been conducted that had a clear focus on street papers. The goal, therefore, is to give scientific visibility to these street papers, by defining this ‘new’ text type and its (linguistic) characteristics; and comparing its language use to the journalistic language in Italian newspapers.

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“Eu peguei e apresentei”: A syntactic analysis of the [V1 (E) + V2] construction in Brazilian Portuguese (BP)

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Abstract

The object of this paper is the construction [V1 (e) + V2] in Brazilian Portuguese (BP), especially when [V1] is the verb 'pegar', as in the example: a) Eu peguei (e) saí. From (1), we can see that there is the expression of a single event: “sair (going out)”. In the literature, Rodrigues (2004, 2006) points out characteristics related to the construction, such as a) V1 and V2 share the same subject, verb inflection, number and person; b) negation only applies to V2; c) the structure has a fixed order; d) V1 cannot be the target of questioning. From a syntactic point of view, for Almeida and Oliveira (2010) and Grilo and Tavares (2013) the construction is undergoing a process of grammaticalization, in which the lexical verb 'pegar' becomes a grammatical item, functioning in a similar way to an auxiliary verb, which is also observed in Daoud (2023). On the other hand, a different reading is presented by Carvalho and Santos (2024), in which the construction with 'pegar', or other constructions formed by [V1 (E) + V2], would be an SVC (Serial Verb Construction), widely found in Asian and African languages. One of the characteristics of SVC would be the lack of the connective 'e (and)' and monoclausal sentence, so something like “aí, ela pegou e foi embora” would be an example of this type of construction. The aims of this presentation are twofold: a) To present a systematic review of the literature on this construction in BP; b) To check to what extent the proposed descriptions account for the BP data. The data comes from the internet, using the Google and X search tools, in which we entered the verb 'pegar' and the target V2 for collection. Preliminary results of our analysis show that these proposals do not account for the data.

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