

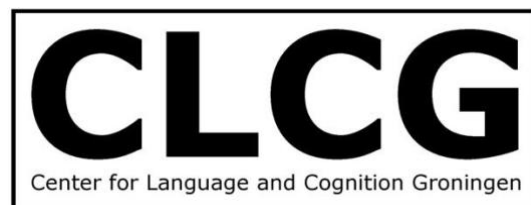


**BOOK OF
ABSTRACTS**

Thank you to our sponsors:



Algemene
Vereniging voor
Taalwetenschap



Netherlands Graduate School of Linguistics
Landelijke Onderzoekschool Taalwetenschap



Global
textware

/instituut
voor de
Nederlandse
taal/



rijksuniversiteit
groningen

groninger universiteitsfonds



university of
groningen

faculty of arts



Table of Contents

Abstracts and references have been published in the format sent by the authors.

Full programme

Keynotes

The origins of rhythm and vocal learning: A comparative approach

Prof. dr. Andrea Ravignani

Inclusive speech technology: Developing automatic speech recognition for everyone

Dr. Odette Scharenborg

Bringing order to chaos: How accountability organizes language in interaction

Dr. Emily Hofstetter

Emotions do not enter grammar because they are constructed (by grammar)

Prof. dr. Martina Wiltschko

Parallel Sessions

Parallel Session 1

Maria Mazzoli & Hanneke Loerts

Bekoffiën, opbelbaar or rather kunstelijk? Testing the productivity of Dutch derivational schemas by crossing corpus-based and experimental data

Merle Kooij

Save the women! Maximizing the effect of CPR instructions with effective visualizations

Ying Hu

Context-deictic Space Model in Critical Discourse Studies-A Case Study of Theresa May's Brexit speech

Parallel Session 2

Silvia Stopponi, Saskia Peels-Matthey & Malvina Nissim

Bridging Ancient Greek Studies and NLP - Collecting Expert Judgements About Ancient Greek Semantics: Challenges and Results

Lourens Visser

Old and Middle English adverbs of degree in their wider West Germanic context

Prudence de Pontbriand

Across the board clitic placement in medieval French

BOOK OF ABSTRACTS

Parallel Session 3

Penny Heisterkamp, Anja Schüppert, Veerle Baaijen & Marije Michel

Student learning in EMI contexts: A research synthesis for countries with a high proficiency in English

Caleb Prichard

The Need and Potential for Humor Competency Instruction in L2 Education

Dan Mu, Xuechun Wu, Srdjan Popov, Jelmer Borst & Frank Tsiwah

Is there a long-term memory benefit for reading words aloud? Behavioral and neurophysiological evidence

Karin van der Worp

The Linguistic Landscape of a market in the Basque Autonomous Community: between the local and the global

Parallel Session 4

Nelleke Jansen, Shuyao Li, Hanneke Loerts, Eleanor E. Harding, Deniz Başkent & Wander Lowie

Prosodic focus marking in L2 English speech production: Investigating the role of musical abilities

Chenyi Lin, Alice Vanni, Ting Zhang, Weixi Lai, Vass Verkhodanova, Matt Coler

Tones and Smiles: A pilot study on the influence of smiling on Mandarin Chinese tones

Valentine Lucquiaux, Andrés Viñas Martínez, Katharina Polsterer, Francisca Duarte Santos Mendes Reis, Sanne Moorman, Defne Abur

Using auditory perturbations to explore voice control in humans and birds

Parallel Session 5

Maria Francis, Volha Petukhova, Julius Steuer, Dietrich Klakow

Pervasive questioning: Presupposition Generation for Cross-Examination Interactions

Yannick Jadoul, Diandra Duengen, Bart de Boer, Andrea Ravignani

Python in the speech sciences: a bioacoustician's perspective

Jiahui Liang, Stephan Raaijmakers, Aletta G. Dorst, Jelena Prokic

Using GPT4 for Conventional Metaphor Detection

Parallel Session 6

Joanna Porkert, Anna Siyanova-Chanturia, Merel Keijzer

Processing Gender Stereotypes in the Bilingual Brain

Jimena González Sáez, Drew J. McLaughlin, Robert Hartsuiker

Task-evoked pupil response for voluntary, incentivised, and cued language-switching in Spanish-Basque bilinguals

Vincent Fan, Charisti Styliara, Laura Fiche, Hanneke Loerts, Anastasia Pattemore

Attention Paid, Words Learned: Vocabulary Learning with Enhanced Subtitles

BOOK OF ABSTRACTS

Parallel Session 7

Maarten Bogaards

Two positions for viewpoint aspect below little v

Marjolein Wietske Talsma

Layered derivations and the unergative/unaccusative distinction

Zeqi Zhao, Gautam Ottur

A reassessment of Mandarin Universal Quantificational Expressions mei vs. suoyou

Lex Cloin-Tavenier

Adverbs, arguments, and well-mannered pronominals

Parallel Session 8

Cheyenne Svaldi, Branislava Curcic-Blake, Julie Tseng, Kim Vos, Aliene Reinders, Roel Jonkers, Vânia de Aguiar

The neural architecture of word learning: A study in developmental language disorder

Vânia de Aguiar, Juan-Ignacio Galli, Cheyenne Svaldi, Kim Vos, Aliene Reinders, Annet Kingma, Branislava Ćurčić-Blake, Roel Jonkers

Grey matter correlates of verbal learning in children with Developmental Language Disorder and typically developing children

Nikki Hoekzema, Lena Rybka, Katharina Faust, Peter Vajkoczy, Thomas Picht, Adrià Rofes

An Intraoperative Language Test for Awake Brain Surgeries: German Text- to-Picture Semantic Association Task (GTP-SAT)

Jorge Ricardo Hidalgo Chagoya, Roel Jonkers, Simona Mancini

Syntactic and Morphological Complexity across Discourse Tasks in Spanish Aphasia

Workshops & Demonstrations

Becoming a LinkedIn expert

Marjolein te Winkel

LaTeX

Thijs Janzen

Poster sessions

Thursday 13 June

Friday 14 June

Maps

General instructions

Academy Building

Harmony Building

Food & Drinks

Conference dinner

Closing drinks

Thursday, 13 June 2024		
8:30 – 9:30	[Academy Building, Entrance hall] CONFERENCE REGISTRATION	
9:30 – 9:40	[Academy Building, Offerhauszaal] WELCOME BY CLCG Director: Prof. Dr. Gertjan van Noord	
9:40 – 10:40	[Academy Building, Offerhauszaal] Keynote by Andrea Ravignani The origins of rhythm and vocal learning: A comparative approach (Chair: Vass Verkhodanova)	
10:40 – 11:00	[Academy building, Restaurant in the basement] BREAK (20 min) Coffee, tea	
11:00 – 12:00	[Academy Building, Zernikezaal] Parallel session 1 (Chair: Charlotte Gooskens)	[Academy Building, Van der Leeuwzaal] Parallel session 2 (Chair: Jack Hoeksema)
	Maria Mazzoli, Hanneke Loerts <i>Bekoffiën, opbelbaar or rather kunstelijk? Testing the productivity of Dutch derivational schemas by crossing corpus-based and experimental data</i>	Silvia Stopponi, Saskia Peels-Matthey, Malvina Nissim <i>Bridging Ancient Greek Studies and NLP - Collecting Expert Judgements About Ancient Greek Semantics: Challenges and Results</i>
	Merle Kooij <i>Save the women! Maximizing the effect of CPR instructions with effective visualizations</i>	Lourens Visser <i>Old and Middle English adverbs of degree in their wider West Germanic context</i>

BOOK OF ABSTRACTS

	Ying Hu <i>Context-deictic Space Model in Critical Discourse Studies-A Case Study of Theresa May's Brexit speech</i>	Prudence de Pontbriand <i>Across the board clitic placement in medieval French</i>
12:00 – 13:00	[Academy building, Restaurant in the basement] LUNCH BREAK (60 min)	
13:00 – 14:00	[Academy Building, Offerhauszaal] Keynote by Odette Scharenborg Inclusive speech technology: Developing automatic speech recognition for everyone (Chair: Martijn Wieling)	
14:05 – 14:40	[Academy Building, Zernikezaal] Workshop: Science communication by Marjolein te Winkel	
14:40 – 15:10	[Academy building, Restaurant in the basement] BREAK (30 min) Coffee, tea	
15:10 – 16:30	[Academy Building, Zernikezaal] Parallel session 3 (Chair: Anastasia Pattemore)	[Academy Building, Van der Leeuwzaal] Parallel session 4 (Chair: Ellie Harding)
	Penny Heisterkamp, Anja Schüppert, Veerle Baaijen, Marije Michel <i>Student learning in EMI contexts: A research synthesis for countries with a high proficiency in English</i>	Nelleke Jansen, Shuyao Li, Hanneke Loerts, Eleanor E. Harding, Deniz Başkent, Wander Lowie <i>Prosodic focus marking in L2 English speech production: Investigating the role of musical abilities</i>
	Caleb Prichard <i>The Need and Potential for Humor Competency Instruction in L2 Education</i>	Chenyi Lin, Alice Vanni, Ting Zhang, Weixi Lai, Vass Verkhodanova, Matt Coler <i>Tones and Smiles: A pilot study on the influence of smiling on Mandarin Chinese tones</i>

BOOK OF ABSTRACTS

	Dan Mu, Xuechun Wu, Srdjan Popov, Jelmer Borst, Frank Tsiwah <i>Is there a long-term memory benefit for reading words aloud?</i> <i>Behavioral and neurophysiological evidence</i>	Valentine Lucquiault, Andrés Viñas Martínez, Katharina Polsterer, Francisca Duarte Santos Mendes Reis, Sanne Moorman, Defne Abur <i>Using auditory perturbations to explore voice control in humans and birds</i>
	Karin van der Worp <i>The Linguistic Landscape of a market in the Basque Autonomous Community: between the local and the global</i>	
16:30 – 17:30	[Harmony Building, Marie Loke zaal] POSTER SESSION A	
CONFERENCE DINNER – TEKINEV (18.00 – 21.00)		

Friday, 14 June 2024		
8:30 – 9:00	[Academy Building, Entrance hall] CONFERENCE REGISTRATION	
9:00 – 10:00	[Academy Building, Offerhauszaal] Keynote by Emily Hofstetter Bringing order to chaos: How accountability organizes language in interaction (Chair: Myrte Gosen)	
10:00 – 11:00	[Academy Building, Zernikezaal] Parallel session 5 (Chair: Rik van Noord)	[Academy Building, Van der Leeuwzaal] Parallel session 6 (Chair: Merel Keijzer)
	Maria Francis, Volha Petukhova, Julius Steuer, Dietrich Klakow <i>Pervasive questioning: Presupposition Generation for Cross-Examination Interactions</i>	Joanna Porkert, Anna Siyanova-Chanturia, Merel Keijzer <i>Processing Gender Stereotypes in the Bilingual Brain</i>
	Yannick Jadoul, Diandra Duengen, Bart de Boer, Andrea Ravignani <i>Python in the speech sciences: a bioacoustician's perspective</i>	Jimena González Sáez, Drew J. McLaughlin, Robert Hartsuiker <i>Task-evoked pupil response for voluntary, incentivised, and cued language-switching in Spanish-Basque bilinguals</i>
	Jiahui Liang, Stephan Raaijmakers, Aletta G. Dorst, Jelena Prokic <i>Using GPT4 for Conventional Metaphor Detection</i>	Vincent Fan, Charisti Styliara, Laura Fiche, Hanneke Loerts, Anastasia Pattemore <i>Attention Paid, Words Learned: Vocabulary Learning with Enhanced Subtitles</i>
11:00 – 11:20	[Academy building, Restaurant in the basement] BREAK (20 min) Coffee, tea	
11:20 – 12.40	[Academy Building, Zernikezaal] Parallel session 7 (Chair: Jan-Wouter Zwart)	[Academy Building, Van der Leeuwzaal] Parallel session 8 (Chair: Dörte de Kok)

BOOK OF ABSTRACTS

	<p>Maarten Bogaards</p> <p><i>Two positions for viewpoint aspect below little v</i></p>	<p>Cheyenne Svaldi, Branislava Curcic-Blake, Julie Tseng, Kim Vos, Aliene Reinders, Roel Jonkers, Vânia de Aguiar</p> <p><i>The neural architecture of word learning: A study in developmental language disorder</i></p>
	<p>Marjolein Wietske Talsma</p> <p><i>Layered derivations and the unergative/unaccusative distinction</i></p>	<p>Vânia de Aguiar, Juan-Ignacio Galli, Cheyenne Svaldi, Kim Vos, Aliene Reinders, Annet Kingma, Branislava Ćurčić-Blake, Roel Jonkers</p> <p><i>Grey matter correlates of verbal learning in children with Developmental Language Disorder and typically developing children</i></p>
	<p>Zeqi Zhao, Gautam Ottur</p> <p><i>A reassessment of Mandarin Universal Quantificational Expressions mei vs. suoyou</i></p>	<p>Nikki Hoekzema, Lena Rybka, Katharina Faust, Peter Vajkoczy, Thomas Picht, Adrià Rofes</p> <p><i>An Intraoperative Language Test for Awake Brain Surgeries: German Text- to-Picture Semantic Association Task (GTP-SAT)</i></p>
	<p>Lex Cloin-Tavenier</p> <p><i>Adverbs, arguments, and well-mannered pronominals</i></p>	<p>Jorge Ricardo Hidalgo Chagoya, Roel Jonkers, Simona Mancini</p> <p><i>Syntactic and Morphological Complexity across Discourse Tasks in Spanish Aphasia</i></p>
12:40 – 13:40	<p>[Academy building, Restaurant in the basement]</p> <p>LUNCH BREAK (60 min)</p>	
13:40 - 14:15	<p>[Academy Building, Zernikezaal]</p> <p>Workshop: LaTeX by Thijs Janzen</p>	
14:20 – 15:20	<p>[Academy Building, Offerhauszaal]</p> <p>Keynote by Martina Wiltschko</p> <p>(Chair: Petra Hendriks)</p>	
15:30 – 16:30	<p>[Harmony Building, Marielokezaal]</p> <p>POSTER SESSION B</p>	
16:30 - 18.00	<p>[De Urwerker, next to the Harmony Building]</p> <p>CLOSING DRINKS</p>	

Keynotes

Keynote session 1

The origins of rhythm and vocal learning: A comparative approach

Prof. dr. Andrea Ravignani
Sapienza University of Rome



Abstract

Who's got rhythm? And why are we such chatty animals? Human music and speech are peculiar behaviors from a biological perspective: Although extremely common in humans, at first sight they do not seem to confer any direct evolutionary advantage. Many hypotheses try to explain the origins of acoustic rhythm capacities in our species, but few are empirically tested and compared. Because music and speech do not fossilize, and lacking a time machine, the comparative approach provides a powerful tool to tap into human cognitive history. Notably, homologous or analogous building blocks underlying human rhythm can be found across a few animal species and developmental stages. Hence, investigating rhythm across species is not only interesting in itself, but it is crucial to unveil music-like and speech-like behaviors present in early hominids. In this talk, I will discuss the major hypotheses for the evolution of vocal rhythmicity in humans and other animals, which link acoustic rhythms to vocal learning (a precursor to speech), gait, breathing, or chorusing. I will suggest how integrating approaches from ethology, psychology, neuroscience, modeling, voice sciences, and physiology is needed to obtain a full picture. I will then zoom in on some crucial species which are key to test alternative hypotheses on rhythm origins, with particular attention to the rhythm-vocal learning link. I will show how three strands of research - partly neglected until now - can be particularly fruitful in shedding light on the evolution of rhythm and vocal learning. I will present rhythm experiments in marine mammals, primates, and other species, suggesting that rhythm research in non-human animals can also benefit from ecologically-relevant setups, combining strengths and knowledge from human cognitive neuroscience and behavioral ecology. Second, I will discuss the interplay between vocal anatomy, learning, and development in harbor seal pups, arguing for their importance as model species for human speech origins. Finally, I will present human experiments where musical rhythm is created and evolves culturally due to cognitive and motoric biases, showing the importance of an interplay between biology and cultural transmission. These results suggest that, while some species may share one or more building blocks of speech and music, the 'full package' may be uniquely human.

Bio

Andrea Ravignani is a Professor at the Department of Human Neurosciences, Sapienza University of Rome, Italy and a Honorary Professor of Neuroscience & Music Dept. of Clinical Medicine, Aarhus University, DK. Until May 2023, he has been an Associate Professor at the Center for Music in the Brain, Aarhus University, Denmark & a W2 Independent Group Leader at the Max Planck Institute for Psycholinguistics, where he led the Comparative Bioacoustics Research Group. Andrea has studied, researched and worked in several areas, including mathematics, biology, speech sciences, musicology, computer science and cognitive psychology - this multidisciplinaryity is mirrored in his research team. Andrea's research group at the MPI was highly interdisciplinary, featuring 10 scientists from many areas, including cognitive neuroscience, ethology, experimental psychology, linguistics, communication sciences, computer science, AI, bioacoustics, primatology and marine mammalogy. Since the end of his PhD in 2014, Andrea has written approximately 100 works (journal articles, book chapters, etc.) published in *Nature Human Behaviour*, *Cognition*, *Nature*, *PNAS*, *Current Biology*, *Science*, *Nature Communications*, *Music Perception*, *Trends in Cognitive Science*, etc. Recently, Andrea has been awarded an ERC Starting Grant, a HFSP Grant, and a Sapienza PI grant to investigate the origins of rhythm and vocal learning using a multi-species and multi-methods approach. He firmly believes in and supports kindness in science.

Keynote session 2

Inclusive speech technology: Developing automatic speech recognition for everyone

Dr. Odette Scharenborg
Delft University of Technology



Abstract

Automatic speech recognition (ASR) is increasingly used, e.g., in emergency response centers, domestic voice assistants, and search engines. Because of the paramount relevance spoken language plays in our lives, it is critical that ASR systems are able to deal with the variability in the way people speak (e.g., due to speaker differences, demographics, different speaking styles, and differently abled users). ASR systems promise to deliver objective interpretation of human speech. Practice and recent evidence however suggests that the state-of-the-art ASRs struggle with the large variation in speech due to e.g., gender, age, speech impairment, race, and accents. The overarching goal in our research is to uncover bias in ASR systems to work towards proactive bias mitigation in ASR. In this talk, I will present systematic experiments aimed at quantifying, identifying the origin of, and mitigating the bias of state-of-the-art ASRs on speech from different, typically low-resource, groups of speakers, with a focus on bias against gender, age, regional accents and non-native accents.

Bio

Odette Scharenborg is an associate professor at the Department of Intelligent Systems, Delft University of Technology, The Netherlands. Her research focuses on human speech-processing inspired automatic speech processing with the aim to develop inclusive speech technology, i.e., speech technology that works for everyone irrespective of how they speak or the language they speak. Odette has been a Board member of the International Speech Communication Association (ISCA) since 2017. From 2021-2023 she served as Vice-President, and currently as President. From 2018-2022, she was a member of the IEEE SPS Speech and Language Processing Technical, and from 2019-2023, a (Senior) Associate Editor of IEEE Signal Processing Letters. She will be the General Chair of Interspeech Rotterdam, 2025

Read more at: <https://odettescharenborg.wordpress.com>

Keynote session 3

Bringing order to chaos: How accountability organizes language in interaction

Dr. Emily Hofstetter
Linköping University



Abstract

Humans are deeply, jointly concerned with making ourselves understandable. Our lives are permeated with 'accountability', the requirement to (be able to) explain one's actions to others. My goal with this talk is to introduce accountability and how it features in what language users do in everyday talk. While public figures' gaffes might take centre stage in media, in fact, when we look at language in actual use, we find that humans constantly make themselves accountable to their interlocutors. I dive into the discipline of analyzing human interactions, focusing on how accountability brings structure to the apparent messiness of everyday use.

I will draw on two of my current research projects where accountability is done with quite different communicative resources. One study looks at how players of a large-scale game about climate change hold each other accountable for antagonistic actions; these accounts are lexical. The other examines rock climbing, where participants use both non-lexical vocalizations and syntactic disruptions to account for strain in the body. Language users take advantage of all available resources to make themselves understandable to others, including their own spontaneous physiological events. I aim to open discussion into what we include in linguistic analysis. When we include the apparent 'chaos' (incomplete utterances to semantic variations, multimodal resources to multiple participation frameworks) in our analysis, we can see how astoundingly nuanced, proficient, and most of all, systematic interlocutors are.

Bio

Emily Hofstetter started out in undergraduate in linguistics but switched once it became clear that there would not be any study of actual language use. Emily now researches human interaction at Linköping University, Sweden, having wound back to linguistics after all. Current projects include examining how the body's physiology and sensations are made available to co-participants with vocalizations (nonlexicalvocalizations.com), and how to use interactional approaches to understand and facilitate discussions about transitioning to sustainable futures, particularly when using 'megagames' for pedagogy (gamesforsocialtransformation.com). Emily is also an occasional Youtuber, making videos that use popular media to explain interaction research concepts (emilyhofstetter.ca).

Keynote session 4

Emotions do not enter grammar because they are constructed
(by grammar)

Prof. dr. Martina Wiltschko
Pompeu Fabra University Barcelona



Abstract

In this talk I explore the relation between language and emotion. While my focus is a linguistic one, I tackle this question informed by insights of theories of emotions within the affective sciences. The core empirical claim I introduce is that there are no grammatical categories dedicated to encoding emotions. This seems to be universally the case and hence appears to be no accident and tells us something about the make-up of human cognition. The absence of grammatical categories dedicated to encoding emotions is surprising given the otherwise close connection between language and emotions as evidenced by phylogenetic, ontogenetic, and neurological phenomena. Hence, one cannot attribute the absence of emotion categories to a complete disconnect between language and emotions (or cognition more generally). Moreover, one might expect such categories to exist, based on cognitive and evolutionary considerations. The conclusion to be drawn is that emotions are not to be considered primitives that could be directly linked to grammatical categories, but instead that emotions are constructed. In this way, the properties of grammar provide new evidence for the theory of constructed emotions. I further explore the idea that linguistic theory may shed light on how emotions are constructed. Specifically, I will introduce the hypothesis that the same architecture that is responsible for the construction of complex linguistic expressions (a grammar of sorts) is also responsible for the construction of emotions.

Bio

Martina Wiltschko is an ICREA research Professor at the Universitat Pompeu Fabra in Barcelona. She is a theoretical linguist, focussing on syntax and its interfaces. She obtained her doctorate in 1995 at the University of Vienna, spent much of her career at the University of British Columbia until 2019 when she assumed her current position. During her tenure at UBC, she focussed mainly on language variation and fieldwork (culminating in her 2014 Cambridge University monograph on the universal structure of categories). She then developed an interest in the nature of language in interaction culminating in her 2021 Cambridge University monograph on the grammar of interactional language. She has recently started a project on the nature of human machine interaction, focussing on the role of interactional language.

Parallel Sessions

Parallel session 1

Bekoffiën, opbelbaar or rather kunstelijk? Testing the productivity of Dutch derivational schemas by crossing corpus-based and experimental data

Maria Mazzoli & Hanneke Loerts

University of Groningen

We conducted a pilot 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' perceptions of productivity, i.e. understandability and potential use of nonce words). Our research questions:

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

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). However, this interrelation is not fully straightforward (Gilquin 2010; Arppe et al. 2010). We have no hypothesis about the patterning of nonce words in terms of understandability and likelihood of use. Although nonce words have attracted some interest (Štekauer 2002, Guz 2012), there is not enough research available.

We build two datasets. We collected frequency measures for constructions in -baar, -(e)lijk, and be-N-en (Sketch Engine Dutch Web 2020 5,890,009,964 words), such as number of types and potential productivity (Baayen & Rochelle 1991). We also elicited understandability and potential use through a web based survey in which the three constructions are crossed with four conditions: nonce, low frequency, high frequency, nonsense words. 41 participants, who had Dutch among their first languages, completed the survey.

A preliminary 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 perceptions of potential use. Interestingly, there are no (statistically) significant differences based on the construction. The bubble of potentiality seems a sort of flatland.

References

- Arppe, Antti, Gilquin, Gaëtanelle, Glynn, Dylan, Hilpert, Martin, Zeschel, Arne. (2010) Cognitive Corpus Linguistics: Five points of debate on current theory and methodology. *Corpora*, 5(1): 1– 27.
- Baayen, Harald and Lieber, Rochelle (1991). Productivity and English derivation: a corpus- based study. *Linguistics*, 29(5): 801–844
- Gilquin, Gaëtanelle (2010). *Corpus, cognition and causative constructions*. Amsterdam: John Benjamins.
- Guz, Wojciech (2012). Are nonce words really deviant, context-dependent, and unlexicalizable? In E. Cyran, H. Kardela and B. Szymanek (eds.), *Sound, Structure and Sense: Studies in Memory of Edmund Gussman*. Lublin: Wydawnictwo KUL. 223–238.
- Schmid, Hans-Jörg. (2010). Does frequency in text instantiate entrenchment in the cognitive system? In D. Glynn and K. Fischer (eds.), *Quantitative methods in cognitive semantics: Corpus-driven approaches*. Berlin: Mouton de Gruyter. 101–133.
- Štekauer, Pavol (2002). On the theory of neologisms and nonce-formations. *Australian Journal of Linguistics*, 22(1): 97–112.

Save the women! Maximizing the effect of CPR instructions with effective visualizations

Merle Kooij

University of Groningen

This presentation will report on a user study set up to evaluate the effectiveness of visualizations that show where helpers should place their hands when performing CPR on a female victim. This is important, since studies show that women have a lower chance of survival than men when it comes to bystander cardiopulmonary resuscitation (CPR) outside the hospital (Souers et al., 2021). During an emergency where CPR is needed, bystander intervention plays a crucial role and can significantly improve the victim's survival rate from 7.3% to 13.6%. However, female victims are less often helped by bystanders due to their hesitation to place hands on a female victim's chest. This study aims to evaluate the effect of bright colored arrows within a first-aid visualization that illustrates how the hands of the helper should be placed on a female victim's chest, in order to increase the survival rate and develop helpful instructions that are accessible for citizens at any time.

Literature on multimodal communications show that visual cues like arrows in bright colors are effective in guiding the attention of the reader and help to understand tasks (De Koning et al., 2009; Lowe en Boucheix, 2007). The user study presented employs a mixed method approach, in which participants performed a task and were interviewed afterwards. Half of the participants were offered an instructional visualization without arrows and the other half were offered the same instructional visualization enhanced with additional arrows. The participants' hand placement was filmed and analyzed. Interviews were conducted to collect further insights into the participants' decision making process and the effects of the visual instruction. The presentation of this study will include the results of the study which is currently in progress.

References

- De Koning, B. B., Tabbers, H. K., Rikers, R. M. J. P., & Paas, F. (2009). Towards a framework for attention cueing in instructional animations: Guidelines for Research and design. *Educational Psychology Review*, 21(2), 113–140. <https://doi.org/10.1007/s10648-00>
- Lowe, R. K., & Boucheix, J.- M. (2007). Eye tracking as a basis for animation design. Paper presented at the Bi-annual meeting of the European Association of Research on Learning and Instruction. Budapest, Hungary.
- Souers, A., Zuver, C., Rodriguez, A., Van Dillen, C., Hunter, C., & Papa, L. (2021). Bystander CPR occurrences in out of hospital cardiac arrest between sexes. *Resuscitation*, 166, 1–6. <https://doi.org/10.1016/j.resuscitation.2021.06.021>

Context-deictic Space Model in Critical Discourse Studies-A Case Study of Theresa May's Brexit speech

Ying Hu

Ocean University of China/Vrije Universiteit Amsterdam

This research introduces the Context-Deictic Model, designed to bridge Critical Discourse Studies (CDS) and Cognitive Linguistics (CL) by integrating the Context Model with Deictic Space Theory. This innovative approach aims at structuring and visualizing the abstract dimensions of social cognition within CDS. By mapping essential context model categories—such as setting, events, and participants—onto a deictic space defined by spatial (s), temporal (t), and axiological (a) dimensions, the model uncovers and graphically represents the underlying intentions and power dynamics in discourse. An analysis of a Brexit speech by Theresa May demonstrates the model's robust interpretative power and practical utility, offering clear visual insights into the strategies employed by the discourse's architect. The Context-Deictic Space Model not only elucidates the manipulation of discourse but also highlights the potential of social cognition research within the realm of CDS. This study thus paves the way for a deeper understanding of the interplay between language, cognition, and society.

References(part)

- [1] Cap P. Crossing symbolic distances in political discourse space: Evaluative rhetoric within the framework of proximization[J]. *Critical Discourse Studies*, 2015, 12(3): 313-329.
- [2] Cap P. Issues in cognitive discourse research: Positioning, representation, conceptualization[J]. *Studia kulturoznawczo-filologiczne*, 2020, (10): 47-66.
- [3] Cap P. Proximization Theory and critical discourse studies: a promising connection?[J]. *International Review of Pragmatics*, 2013, 5(2): 293-317.
- [4] Cap P. Studying ideological worldviews in political discourse space: Critical-cognitive advances in the analysis of conflict and coercion[J]. *Journal of Pragmatics*, 2017, 108: 17-27.
- [5] Cap P. Towards the proximization model of the analysis of legitimization in political discourse[J]. *Journal of Pragmatics*, 2008, 40(1): 17-41.
- [6] Cervi L, Tejedor S, Alencar Dornelles M. When Populists Govern the Country: Strategies of Legitimization of Anti-Immigration Policies in Salvini's Italy[J]. *Sustainability*, 2020, 12(23): 10225.
- [7] Charteris-Black J. *Corpus approaches to critical metaphor analysis*[M]. Berlin: Springer, 2004.
- [8] Chen L, Zhang D, He Y, et al. Transcultural political communication from the perspective of Proximization Theory: A comparative analysis on the corpuses of the Sino-US trade war[J]. *Discourse & Communication*, 2020, 14(4): 341-361.
- [9] Chilton P. *Analysing political discourse: Theory and practice*[M]. London; New York: Routledge, 2004.
- [10] Chilton P. *Language, space and mind: The conceptual geometry of linguistic meaning*[M]. Cambridge: Cambridge University Press, 2014.
- [11] Chilton P. *Security metaphors: Cold war discourse from containment to common house*[M]. New York: Peter Lang Pub Incorporated, 1996.
- [12] Chilton P. The conceptual structure of deontic meaning: A model based on geometrical principles[J]. *Language and Cognition*, 2010, 2(2): 191-220.
- [13] Chilton P. Vectors, viewpoint and viewpoint shift[J]. *Annual Review of Cognitive Linguistics*, 2005, 3(1): 78-116.
- [14] Dunmire P L. *Projecting the future through political discourse: The case of the bush doctrine*[M]. Amsterdam: John Benjamins Publishing, 2011.
- [15] Fauconnier G, Turner M. *The way we think*[M]. New York: Basic Books, 2002: 312-331.
- [16] Fauconnier G. *Mental spaces: Aspects of meaning construction in natural language*[M]. Cambridge: Cambridge University Press, 1994.
- [17] Filardo-Llamas L, Hart C, Kaal B. *Space, time and evaluation in ideological discourse*[M]. London; New York: Routledge, 2017.
- [18] Filardo-Llamas L. Re-contextualizing Political Discourse: An analysis of shifting spaces in songs used as a political tool[J]. *Critical Discourse Studies*, 2015, 12(3): 279-296.
- [19] Gentner D, Stevens A L. (Eds.). *Mental models*[M]. Hillsdale, N.J.: Erlbaum, 1983.
- [20] Halliday M A K. *Introduction to Functional Grammar, Second Edition*[M]. London: Edward Arnold. 1994.
- [21] Hart C. Cognitive Linguistic critical discourse studies[M]// Flowerdew J, Richardson J E. *The Routledge Handbook of Critical*

BOOK OF ABSTRACTS

Discourse Studies. London; New York: Routledge, 2018: 77-91.

[22] Holland J. Mental models in manifesto texts: the case of students for a democratic society and weatherman[D]. Lancaster: Lancaster University, 2018: 34.

[23] Johnson-Laird P N. Mental models: Towards a cognitive science of language, inference, and consciousness[M]. Cambridge, MA: Harvard University Press, 1983. [24] Koller V. Metaphor and gender in business media discourse: A critical cognitive study[M]. Berlin: Springer, 2004.

[25] Kowalski G. Proximization as reception[J]. Bulletin of the Transilvania University of Braşov, Series VII: Social Sciences and Law, 2018, 11(1): 125-138.

[26] Lakoff G, Johnson M. Conceptual metaphor in everyday language[J]. The journal of Philosophy, 1980, 77(8): 453-486.

[27] Lakoff G, Johnson M. Metaphors we live by[M]. Chicago: University of Chicago press, 2008.

[28] Musolff A. Metaphor and political discourse[J]. Analogical Reasoning in Debates about Europe. Basingstoke, 2004, 14.

[29] Ullmann S. Epistemic stancetaking and speaker objectification in a spatio-cognitive discourse world: A critical contrastive analysis of political discourse[J]. Journal of Language and Politics, 2019, 18(3): 393-419.

[30] van Dijk T A. & Kintsch W. Strategies of discourse comprehension[M]. New York: Academic Press, 1983.

[31] van Dijk T A. Cognitive context models and discourse[C]// Stamenov M I. Language Structure, Discourse and the Access to Consciousness, 1997: 198-199.

[32] van Dijk T A. Context[M]// Tracy K, Ilie C, Sandel T. et al. The international encyclopedia of language and social interaction. Hoboken, NJ: John Wiley & Sons, 2015: 1-11.

[33] Van Dijk T A. Discourse analysis as ideology analysis[J]. Language and peace, 1995, 10(47): 142.

[34] van Dijk T A. Discourse and context: A sociocognitive approach[M]. Cambridge: Cambridge University Press, 2008.

[35] Van Dijk T A. Discourse and knowledge: A sociocognitive approach[M]. Cambridge: Cambridge University Press, 2014.

[36] van Dijk T A. Discourse, context and cognition[J]. Discourse studies, 2006, 8(1): 159-177.

[37] van Dijk T A. Discourse, ideology and context[J]. Folia linguistica, 2001, 35(1-2): 11-40. [38] van Dijk T A. Episodic models in discourse processing [C]// Horowitz R, Samuels S J. Comprehending Oral and Written Language. San Diego, CA: Academic Press, 1987: 161-196.

[39] Van Dijk T A. Socio-cognitive discourse studies[M]//The Routledge handbook of critical discourse studies. New York: Routledge, 2018: 52-74.

[40] Van Dijk T A. Text, context and knowledge[J]. Hizkuntza Naturalaren Prozesamenduari eta Zientzia Kognitiboari Nazioarteko, 2008, 5.

[41] Wang Y. The Legitimacy of Chinese Outward Investment in English News—A Cognitive Approach to Discursive Legitimation[J]. Theory and Practice in Language Studies, 2020, 10(5): 557-568.

[42] Werth P. Text worlds: Representing conceptual space in discourse[M]. New Jersey: Prentice Hall, 1999: 314-315.

[43] Zwaan R A, Madden C J. Updating situation models[J]. Journal of Experimental Psychology: Learning, Memory, and Cognition, 2004, 30(1), 283–288. [44] Zwaan R A, Radvansky G A. Situation models in language comprehension and memory[J]. Psychological bulletin, 1998, 123(2): 162-185.

[45] Zwaan R A. Situation models, mental simulations, and abstract concepts in discourse comprehension[J]. Psychonomic bulletin & review, 2016, 23(4): 1028-1034. [46] Zwaan R A. Situation models: The mental leap into imagined worlds[J]. Current directions in psychological science, 1999, 8(1): 15-18.

Parallel session 2

Bridging Ancient Greek Studies and NLP - Collecting Expert Judgements About Ancient Greek Semantics: Challenges and Results

Silvia Stopponi, Saskia Peels-Matthey & Malvina Nissim
University of Groningen

To evaluate the performance of word embeddings trained on Ancient Greek, we built the AGREE benchmark (Stopponi et al., 2024). To create the dataset we did not follow the approach of the only existing previous work for Ancient Greek, Rodda et al. (2019), where data about semantic relationships between words were extracted from already existing ancient and modern resources.

Our approach, described in this presentation, was to collect expert judgements about word relatedness. For the collection we distributed two questionnaires in which scholars of Ancient Greek gave judgements about word-relatedness, by suggesting related words to some input words or by rating the strength of the association between already-made pairs of words. Some of the proposed pairs had been proposed by other experts in the first part of the data collection, others were extracted from language models. Experts from different continents participated in the questionnaires.

In our presentation we mention the challenges of adapting standard approaches to this type of data collection for modern languages (in particular, we largely followed the steps in Ercan & Yıldız, 2018) to the case of a low-resource language without native speakers, Ancient Greek. We present the solutions adopted and the results of the data collection. In particular, from the results we show examples of the different kind of knowledge about word relatedness acquired by humans and models through two different processes, human learning and model training.

References:

- Gökhan Ercan, Olcay Taner Yıldız (2018). Anlamver: Semantic Model Evaluation Dataset for Turkish - Word Similarity and Relatedness. In: Proceedings of the 27th International Conference on Computational Linguistics. Association for Computational Linguistics, Santa Fe, New Mexico, USA, 3819–36.
- Martina Astrid Rodda, Philomen Probert, Barbara McGillivray (2019). Vector space models of Ancient Greek word meaning, and a case study on Homer. *Traitement Automatique des Langues*, 60(3): 63–87.
- Silvia Stopponi, Saskia Peels-Matthey, Malvina Nissim (2024). AGREE: a new benchmark for the evaluation of distributional semantic models of ancient Greek. *Digital Scholarship in the Humanities*. <https://doi.org/10.1093/llc/fqad087>

Old and Middle English adverbs of degree in their wider West Germanic context

Lourens Visser

University of Groningen

Adverbs of degree are those adverbs that can strengthen (e.g. *very*), weaken (e.g. *hardly*) or reinforce (e.g. *completely*) a statement, and their study has a relatively long tradition for English. Previous research has revealed that the usage of individual adverbs of degree is governed by a variety of rules and that they are typically prone to undergo change over time (e.g. Bolinger 1972, Klein 1998). While there is considerable research on adverbs of degree in historical English (e.g. Fettig 1934, Peltola 1971, Ingersoll 1978: 153–203, Peters 1993, Mustanoja 2016: 313–330, Stratton 2022), studies on the topics have generally paid little attention to the developments that were happening in the wider West Germanic language family. This is, in part, due to the fact that research on the histories of the other West Germanic languages is much more limited. In my own research, I identified “Middle” Germanic (i.e. Middle Dutch, Middle Low German, and Middle High German) as a period of convergence, with the rise of *sēre* ‘very, sorely’ as an adverb of degree (cf. Dutch *zeer*, German *sehr*) being a prominent shared development (Visser 2023). Using corpus data, the present study thus contextualises the changes in Old and Middle English within the wider language family by comparing them to the changes that occurred in Middle Dutch and Middle Low German. Old and Middle English adverbs included in the analysis are *swīðe/swīthe* ‘very’, *ful* ‘fully, very’, *micle/muchel* ‘much’, *sāre/sōre* ‘sorely’, *gearwe/yāre* ‘wholly’, *fela/fēle* ‘very’, and *hearde/harde* ‘firmly’. The results show that English largely develops independently, with little evidence of convergence. Despite language contact occurring between English and Continental West Germanic (Hendriks 2012), said contact was apparently not substantial enough to influence the system of adverbs of degree. Influence from Old Norse and French is similarly limited.

References

- Bolinger, Dwight. 1972. *Degree words*. Berlin: De Gruyter Mouton.
- Fettig, Adolf. 1934. *Die Gradadverbien im Mittelenglischen*. Heidelberg: Carl Winter.
- Klein, Henny. 1998. *Adverbs of degree in Dutch and related languages*. Amsterdam & Philadelphia: John Benjamins.
- Hendriks, Jennifer. 2012. English in contact: German and Dutch. In Alexander Bergs & Laurel J. Brinton (eds.), *English historical linguistics: An international handbook*, vol. 2, 1659–1670. Berlin & Boston: De Gruyter.
- Ingersoll, Sheila Most. 1978. *Intensive and restrictive modification in Old English*. Heidelberg: Carl Winter.
- Mustanoja, Tauno F. 2016. *A Middle English syntax: Parts of speech*. Amsterdam: John Benjamins.
- Peltola, Niilo. 1971. Observations on intensification in Old English poetry. *Neuphilologische Mitteilungen* 72(4). 649–690.
- Peters, Hans. 1993. *Die englischen Gradadverbien der Kategorie booster*. Tübingen: Gunter Narr.
- Stratton, James M. 2022. Old English intensifiers: The beginnings of the English intensifier system. *Journal of Historical Linguistics* 12(1). 31–69.
- Visser, Lourens. 2023. Old Saxon and Middle Low German adverbs of degree: A case of diachronic discontinuity?. *Journal of Germanic Linguistics* 35(3). 266–306.

Across the board clitic placement in medieval French

Prudence de Pontbriand

University of Göttingen

During the medieval period (13th – 15th centuries), in a coordination structure, the object in the second conjunct could not be repeated if its referent was the object of the first conjunct (as in (1)).

(1) *donc Vaspasien les deserta et destruist*

thus Vespasian them.PL deserted.3SG and destroyed.3SG

‘thus Vespasian deserted them and destroyed (them)’ (*Graal*, 53)

Such an example is no longer considered grammatical in modern French. Previous studies on the phenomenon classified such structures as being the result of null objects (see Arteaga, 1998, Donaldson, 2013). The present work will argue against such an analysis and will instead argue that the placement of the clitic in such structures is due to Across-The-Board extraction in a coordination structure. Such an analysis is not new for modern Romance languages which display similar structures, like European Portuguese and Spanish (see Matos, 2000). The present work proposes that the non-repetition of the clitic in the second conjunct in (1) is because the clitics in both conjunct, each occurring at the edge of each conjunct, are extracted from their conjuncts to later be remerged outside of the structure. The clitic then has scope over the whole coordination structure (consisting of namely the two verbs), rather than the conjunct in which it originally occurred. Some further characteristics of the structure will be considered in the presentation which can argue towards such an analysis such as the absence of case or TAM mismatches between the conjunct, as well as the fact that the verbs involved in the coordination denote a single event (deserter could also mean ‘to ruin’ in medieval French, making the coordination in (1) denote the single event of destruction of a city). The scope of the clitic can be extended to the second conjunct due to these characteristics.

References

Arteaga, D. (1998). "On null objects in Old French." AMSTERDAM STUDIES IN THE THEORY AND HISTORY OF LINGUISTIC SCIENCE SERIES 4, 1-12. **Donaldson, B.** (2013). Null Objects in Old French. In *Research on Old French: The state of the art* (pp. 61-86). Springer, Dordrecht. **Matos, G.** (2000). Across-the-Board Clitic Placement in Romance Languages. *Probus*, 12, 229-259.

Parallel session 3

Student learning in EMI contexts: A research synthesis for countries with a high proficiency in English

Penny Heisterkamp, Anja Schüppert, Veerle Baaijen & Marije Michel
University of Groningen

In the last years, the potential effects of English as medium of instruction (EMI) on language and content learning have received considerable attention in the Netherlands. As existing EMI reviews (e.g., Macaro et al., 2018; Van den Doel et al., 2021) have analysed studies from the Netherlands together with studies from countries where English and EMI play a considerably different role (e.g., China), their outcomes might not be transferable to the Dutch context. The aim of this research synthesis is to map existing research on students' English skills and content learning systematically in Dutch EMI contexts and in countries with a similar EMI environment.

Based on data on English proficiency (e.g., EF EPI, 2022), the presence of EMI programmes (Maiworm & Wächter, 2014; British Council & StudyPortals, 2021) and the number of students (Eurostat, n.d.), we selected eight countries which were similar to the Netherlands with regard to citizens' average English skills and the role of EMI in higher education. Next, we used search queries in seven databases to find relevant papers, book chapters and dissertations published between 2009 and 2023. After removing duplicates and abstract screening, we mapped the information provided about participant populations, investigated language skills, types of research instruments for and analyses of students' language skills and content learning, use of control conditions and outcomes for language skills and content learning for the roughly 40 selected papers.

The results provide a clearer image of the effects of EMI on student learning in countries with relatively advanced English proficiency levels and a relatively strong EMI presence. In addition, the synthesis highlights some of the methodological challenges in the field of EMI.

Sources

- British Council & StudyPortals. (2021). The changing landscape of English-taught programmes.
https://studyportals.com/wp-content/uploads/2021/12/British-Council_Studyportals_The-changing-landscape-of-English-taught-programmes-in-2021.pdf
- Van den Doel, R., Edwards, A., Van Beuningen, C., Breetvelt, I., & De Graaff, R. (2021). Effecten van Engels als voertaal in het hoger onderwijs: Leeromgeving, leerprocessen, leeropbrengsten.
<https://kohnstamminstituut.nl/rapport/engels-voertaal-hoger-onderwijs/>
- EF EPI. (2022). EF EPI: EF English Proficiency Index.
<https://www.ef.com/assetscdn/WIBlwq6RdJvcD9bc8RMd/cefcem-epi-site/reports/2022/ef-epi-2022-english.pdf>
- Eurostat. (n.d.). Students enrolled in tertiary education by education level, programme orientation, sex, type of institution and intensity of participation. [Data set].
https://ec.europa.eu/eurostat/databrowser/view/EDUC_UOE_ENRT01_custom_6923865/default/table?lang=en
- Macaro, E., Curle, S., Pun, J., An, J., & Dearden, J. (2018). A systematic review of English medium instruction in higher education. *Language Teaching*, 51(1), 36-76. <https://doi.org/10.1017/S0261444817000350>
- Maiworm, F., & Wächter, B. (2014). The big picture. In B. Wächter & F. Maiworm (Eds.), *English-taught programmes in European higher education: The state of play in 2014* (pp. 25-62). Lemmens.

The Need and Potential for Humor Competency Instruction in L2 Education

Caleb Prichard

Okayama University

Humor is an essential part of communication, including in intercultural interactions among speakers of different L1 backgrounds. However, humor functions and characteristics greatly vary between languages and cultures. While the ability to engage in humor in the L2 can help learners achieve several communicative objectives and help them form bonds with target language speakers, a lack of humor competency can result in embarrassment, conflict, and learner demotivation (Bell & Pomerantz, 2016). This presentation gives an overview of research on incorporating humor competency instruction, including four recently published studies by the presenter (a visiting professor from an overseas university).

Humor competency training involves providing learners with skills instruction to help them deepen their awareness of respective forms of humor they may encounter in the target culture(s) (Rucynski & Prichard, 2020; Wulf, 2010). Learners in the cultural context of Japan, for example, may struggle to detect and understand forms of humor that are relatively infrequent in their own culture, including satirical news (Prichard & Rucynski, 2019) and verbal irony (Prichard & Rucynski, 2020, 2022). Research has shown that humor competency training can help learners make significant gains in their understanding of target language humor (e.g., Kim & Lantolf, 2018; Prichard & Rucynski, 2019). To achieve this, however, instructors and researchers need to ensure that the L2 humor instruction has a clear meaningful objective, provides a thorough overview of the functions of humor, and includes numerous authentic and modified examples. In addition, there should be engaging practice activities and opportunities for reflection and feedback.

The presenter will overview the key principles of his humor competency training framework and summarize past research results among Japanese learners of English. Finally, after reflecting on recently collected data in Dutch contexts, he will provide insights on the feasibility and need for implementing L2 humor competency instruction in various learning contexts.

References

- Bell, N., & Pomerantz, A. (2019). Humor in L2 pragmatics research. In N. Taguchi (ed.), *The Routledge handbook of second language acquisition and pragmatics* (pp. 63-77), Routledge.
- Kim, J., & Lantolf, J. P. (2016). Developing conceptual understanding of sarcasm in L2 English through explicit instruction. *Language Teaching Research*, 22(2), 208-229.
<https://doi.org/10.1177/1362168816675521>
- Prichard, C., & Rucynski, J. (2019). Second language learners' ability to detect satirical news and the effect of humor competency training. *TESOL Journal*, 10(1), e00366. <https://doi.org/10.1002/tesj.366>
- Prichard, C., & Rucynski, J. (2020). Humor competency training for sarcasm and jocularity. In J. Rucynski Jr. & C. Prichard (Eds.), *Bridging the humor barrier: Humor competency training in English language teaching* (pp. 165-192). Lexington Books.
- Prichard, C., & Rucynski, J. (2022). L2 learners' ability to recognize ironic online comments and the effect of instruction. *System*, 105, 102733. <https://doi.org/10.1016/j.system.2022.102733>
- Rucynski, J., & Prichard, C. (2020). *Bridging the humor barrier: Humor competency training in English language teaching*. Lexington Books.
- Wulf, D. (2010). A humor competence curriculum. *TESOL Quarterly*, 44(1), 155-169.
<https://doi.org/10.5054/tq.2010.215250>

Is there a long-term memory benefit for reading words aloud? Behavioral and neurophysiological evidence

Dan Mu, Xuechun Wu, Srdjan Popov, Jelmer Borst & Frank Tsiwah
University of Groningen

Previous behavioral studies have shown that reading text aloud leads to better retention of textual information in memory than reading silently; this phenomenon has been termed the “production effect” (PE: Ozubko & MacLeod, 2010). Mu and colleagues (2023) reported further ERP evidence for the PE by showing that read-aloud words have a stronger Late Positive Component (LPC, a posterior positivity from 500-800ms post-stimulus onset, reflecting recollection of associated contextual details during recognition) than silently-read words. However, existing studies only looked at the immediate memory effect, leaving potential long-term memory benefits of reading aloud unexplored. Therefore, the current study aims to investigate whether reading words aloud leads to stronger recognition memory both immediately and 24 hours later, by testing 30 native Chinese speakers, using ERPs.

The study consists of two phases. For phase 1, participants perform a reading task by reading Chinese words either aloud or silently. Phase 2, 24 hours after phase 1, has 1) a recognition task, where participants are to judge whether words presented to them have been read in phase 1 (delayed condition), 2) a reading task similar to phase 1, and 3) another recognition task testing the words in the reading task of phase 2 (immediate condition). Both their behavioral and brain responses are recorded.

Based on the results of Mu and colleagues, we expect to find a higher accuracy, faster reaction times, and a stronger LPC effect for read-aloud words than read-silently words for the immediate condition. Additionally, since memory consolidation has been found to enhance recognition (McGaugh, 2000), we expect to also find a sustained or even larger effect for the delayed condition. This pattern of results would provide the first behavioral and neurophysiological evidence that using articulatory gestures coupled with auditory feedback in reading words aloud enhances both short-term and long-term memory.

References:

- Ozubko, J. D., & Macleod, C. M. (2010). The production effect in memory: evidence that distinctiveness underlies the benefit. *Journal of experimental psychology. Learning, memory, and cognition*, 36(6), 1543–1547. <https://doi.org/10.1037/a0020604>
- McGaugh, J. L. (2000). "Memory--a Century of Consolidation". *Science*, 287 (5451): 248–251. doi:10.1126/science.287.5451.248.
- Mu, D., Li, S., Popov, S., Tsiwah, F. (2023). Is There Any Memory Benefit in Reading Words Aloud? Evidence from Event-Related Potentials. 43rd TABU Dag 2023 (Oral, June 15 & 16, 2023), Groningen, The Netherlands

The Linguistic Landscape of a market in the Basque Autonomous Community: between the local and the global

Karin van der Worp

UPV/EHU University of the Basque Country

The term Linguistic Landscape (LL) refers to the written languages visible on signage in public spaces. The aim of LL research is to describe patterns of languages visible in public spaces and to understand the motives, ideologies and reactions of people to the signage. Nowadays, most LL we encounter are characterized by multilingualism. LL studies should go beyond the mere counting of languages and look into the complexity of multilingual signs and the glocalization effect, to better understand how the global permeates the local.

This paper reports on the LL in the commerce and hospitality sector, more specifically, it studies the LL of the San Martin Market, a central market in Donostia - San Sebastián, the capital of the province of Gipuzkoa (Basque Autonomous Community, Spain). In this market, the professionals working at the several stands face a linguistically diverse clientele, including local clients speaking the majority language Spanish and/or the minority language Basque, and foreign visitors bringing in other foreign languages, such as English as an international language and French as the language of the neighbour country. The staff moves around the intersection of selling local products, and expanding their horizons in a more global way.

This paper presents the results of a mixed method research. First, photographs of all the language signs in the LL (n= 1.026) are taken and analysed. Second, interviews are held with staff (n= 40) and clients (n= 205), to analyse how they perceive the LL that surrounds them.

Parallel session 4

Prosodic focus marking in L2 English speech production: Investigating the role of musical abilities

Nelleke Jansen, Shuyao Li, Hanneke Loerts, Eleanor E. Harding, Deniz Başkent & Wander Lowie
University of Groningen

Studies on prosody in L2 speech production have shown L1 influence on the prosodic realisation of focus (van Maastricht et al., 2016; Takahashi et al., 2018). However, studies suggest musical abilities may relate to enhanced prosody perception (Jansen et al., 2023) and production (e.g., Gottfried, 2007). The present study investigates L2 English prosodic focus marking by L1 Dutch and L1 Mandarin Chinese speakers, and the potential role of musical abilities. In English and Dutch, focus is marked in intonation by a pitch accent on the focused word, in which Dutch has a flatter pitch range than English (Willems, 1982). Mandarin prosodic focus marking differs from English and Dutch due to the presence of lexical tone (Ip & Cutler, 2016). In this study, participants took part in a game where they instructed the experimenter to place cards with coloured items on the table. Trials differed in information status to elicit contrastive focus on the adjective or noun, for example Put the orange bagel and the YELLOW bagel in front of you (adjective focus) or Put the yellow mango and the yellow BAGEL in front of you (noun focus). Participants performed this task in their L1 and L2. They also completed a C-test as a measure of general English proficiency, and a music perception test. We use Praat to measure prosodic cues in the target words and compare speakers' L1 and L2 productions. We are currently analysing the data, and preliminary results suggest L1 Mandarin Chinese speakers do not differentiate pitch cues between the focus conditions in L2 English, whereas L1 Dutch speakers show more target-like L2 focus marking. In addition, we expect higher musical abilities to be related to decreased L1 transfer. Results will be discussed in light of cross-linguistic differences and implications for L2 acquisition.

References

- Gottfried, T. L. (2007). Music and language learning: Effect of musical training on learning L2 speech contrasts. In M. J. Munro & O.-S. Bohn (Eds.), *Language Experience in Second Language Speech Learning: In Honor of James Emil Flege* (pp. 221-237). Amsterdam: John Benjamins.
- Ip, M. H. K., & Cutler, A. (2016). Cross-language data on five types of prosodic focus. *Proc. Speech Prosody 2016*, 330-334. <https://doi.org/10.21437/SpeechProsody.2016-68>.
- Jansen, N., Harding, E. E., Loerts, H., Başkent, D., & Lowie, W. (2023). The relation between musical abilities and speech prosody perception: A meta-analysis. *Journal of Phonetics*, 101, 101278. <https://doi.org/10.1016/j.wocn.2023.101278>.
- Takahashi, C., Kao, S., Baek, H., Yeung, A. H., Hwang, J., & Broselow, E. (2018). Native and non-native speaker processing and production of contrastive focus prosody. *Proceedings of the Linguistic Society of America*, 3(1), 35:1-13. <https://doi.org/10.3765/plsa.v3i1.4323>.
- van Maastricht, L., Krahmer, E., & Swerts, M. (2016). Prominence patterns in a second language: Intonational transfer from Dutch to Spanish and vice versa. *Language Learning*, 66(1), 124-158. <https://doi.org/10.1111/lang.12141>.
- Willems, N. (1982). *English intonation from a Dutch point of view*. Dordrecht: Foris Publications.

Tones and Smiles: A pilot study on the influence of smiling on Mandarin Chinese tones

Chenyi Lin, Alice Vanni, Ting Zhang, Weixi Lai, Vass Verkhodanova, Matt Coler

University of Groningen

This pilot study explores the interplay between emotional expressions through smiling and speech phonetic features. We will test the hypothesis that smiling alters the F0 mean, variance, and rate of change ($\Delta F0$) in Mandarin Chinese tones, comparing these features between smiling and non-smiling conditions. Previous studies ([1], [2], [3], [4]) have delved into the impact of Smiling Voice in non-tonal languages, revealing the effect of smiling on pitch, duration and intensity.

Given that pitch variations carry lexical meaning in Mandarin Chinese, the question of whether these effects persist in altering pitch in tonal languages necessitates further investigation. Our study thus shifts to Mandarin Chinese, a tonal language, to understand how smiling impacts these features.

For this purpose, we collected read and spontaneous speech in smiling and non-smiling conditions from six native speakers of Mandarin Chinese. Our analysis focused on F0 mean, variance, and $\Delta F0$, following Barthel and Quen'e [5], and Wang and Lee [6], while also exploring syllable duration based on Chang and colleagues' [7] findings. The significance of the results was tested with one-way ANOVA statistical tests. Contrary to the evidence in French [8] and Dutch [5], we found no significant effects for F0 mean and variance in Mandarin Chinese. However, we found a significant difference in the $\Delta F0$ between smiling and non-smiling conditions for tones 1, 2, and 4, but only for spontaneous vs neutral speech. This suggests a stronger influence of spontaneous smiling on tone production in Mandarin Chinese.

This study aims to further bridge the gap between emotion and phonology in Mandarin Chinese, contributing to the broader discourse on the universality of emotional expression within human language and technology. Furthermore, it targets practical implications in fields like affective computing, speech synthesis, and natural language processing, aiming to apply its findings to advance these fields.

References

- [1] V. C. Tartter, "Happy talk: Perceptual and acoustic effects of smiling on speech," *Perception & Psychophysics*, vol. 27, no. 1, pp. 24–27, Jan. 1980.
- [2] E. Lasarczyk and J. Trouvain, "Spread lips + raised larynx + higher f 0 = smiled speech? – an articulatory synthesis approach," *Proceedings of ISSP 2008 - 8th International Seminar on Speech Production*, 01 2008.
- [3] K. J. Kohler, "'Speech-smile', 'speech-laugh', 'laughter' and their sequencing in dialogic interaction," *Phonetica*, vol. 65, no. 1-2, pp. 1–18, 2009.
- [4] I. Torre, "Production and perception of smiling voice," in *Proceedings of the First Postgraduate and Academic Researchers in Linguistics at York (PAR-LAY 2013)*, Sep. 2013, pp. 100–117.
- [5] H. Barthel and H. Quen'e, "Acoustic-phonetic properties of smiling revised: measurements on a natural video corpus," *Proceedings of the 18th International Congress of Phonetic Sciences*, 2015, accepted: 2017-10-27T16:21:04Z.
- [6] T. Wang and Y.-c. Lee, "Does restriction of pitch variation affect the perception of vocal emotions in Mandarin Chinese?" *The Journal of the Acoustical Society of America*, vol. 137, no. 1, pp. EL117–EL123, Dec. 2014.
- [7] H.-S. Chang, C.-Y. Lee, X. Wang, S.-T. Young, C.-H. Li, and W.-C. Chu, "Emotional tones of voice affect the acoustics and perception of Mandarin tones," *PLOS ONE*, vol. 18, no. 4, p. e0283635, Apr. 2023.
- [8] V. Auberg'e and M. Cathiard, "Can we hear the prosody of smile?" *Speech Communication*, vol. 40, no. 1, pp. 87–97, Apr. 2003.

Using auditory perturbations to explore voice control in humans and birds

Valentine Lucquiaux, Andrés Viñas Martínez, Katharina Polsterer, Francisca Duarte Santos Mendes Reis, Sanne Moorman, Defne Abur
University of Groningen

Purpose: This project endeavours building a comprehensive model of zebra finch voice control by replicating human studies of auditory perturbation. Despite birdsong being a proxy of choice for human language, there exists no comprehensive model of it. Ours is intended as a songbird equivalent to Tourville and Guenther's Directions Into Velocities of Articulators (DIVA) model,¹ a comprehensive framework of human speech motor control. Real-time perturbations of auditory feedback during speaking, like artificially raised pitch, cause discrepancy between intended sound and received feedback. This prompts a correction of vowel formants in healthy subjects² while "over-corrections" can indicate atypical sensorimotor integration.³ Adaptive responses thus reflect neural control processes. Zebra finches acquire their song through vocal learning from a tutor during a sensitive phase. Though their song does not change in adulthood, they rely on auditory feedback for active song maintenance, using auditory-motor vocal control pathways that parallel that of the human brain.^{4,5} Previous studies have focused on syllable-specific negative reinforcement, and found that birds can adapt their vocalisations on the timescale of a few hours, but not instantaneously. Our research focuses on the impact of gradually raising the pitch of the whole song, which allows for better comparability with human studies. We are also interested in whether an audience motivates birds to more swiftly correct perceived changes in their song.

Methods: Five male zebra finches were placed in a soundproof booth with an accompanying female, and a manipulated version of their song was simultaneously played back to them through speakers placed in the booth. We assessed the magnitude and speed of the finches' adaptive response.

Results and Discussion: This is an ongoing project. We aim to use the results of this experiment to draw parallels with human speech motor control taking the DIVA model as a reference framework.

References:

- [1] Guenther, F.H.(1994). A neural network model of speech acquisition and motor equivalent speech production. *Biological Cybernetics*, 72(1), 43-53. <https://doi.org/10.1080/01690960903498424>.
- [2] Polsterer, K., Tienkamp, T., Rebernik, T., Sekeres, H., Lucquiaux, V., Wieling, M., & Abur, D. Auditory-Motor Adaptation of Vowels Across Adulthood, 13th International Seminar on Speech Production, 13-17 May 2024, Autrans, France (Poster Presentation).
- [3] Weerathunge, H. R., Tomassi, N. E., & Stepp, C. E. (2022). What Can Altered Auditory Feedback Paradigms Tell Us About Vocal Motor Control in Individuals With Voice Disorders?. *Perspectives of the ASHA special interest groups*, 7(3), 959–976. https://doi.org/10.1044/2022_persp-21-00195
- [4] Nordeen, K. W., & Nordeen, E. J. (2010). Deafening-induced vocal deterioration in adult songbirds is reversed by disrupting a basal ganglia-forebrain circuit. *Journal of Neuroscience* 30(21) : 7392-7400. DOI: <https://doi.org/10.1523/JNEUROSCI.6181-09.2010>
- [5] Brainard, M. S., & Doupe, A. J. (2000). Auditory feedback in learning and maintenance of vocal behaviour. *Nature reviews. Neuroscience*, 1(1) : 31–40. <https://doi.org/10.1038/35036205>

Parallel session 5

Pervasive questioning: Presupposition Generation for Cross-Examination Interactions

Maria Francis, Volha Petukhova, Julius Steuer, Dietrich Klakow

Saarland University

Presuppositions are facts carried by sentences that are taken for granted, and whose proposition must be true for a truth value to be assigned to the sentence. They exhibit a certain set of linguistic traits, such as the ability to project over entailment-cancelling embeddings like negation, that set them apart from other modes of inference such as implication or semantic entailment. We introduce the novel task of presupposition generation, a natural language generation problem where a model is given an input sentence and is tasked with generating a comprehensive list of all presuppositions carried by the input sentence. We also introduce an intermediary task, referred to as presupposition natural language inference (PNLI), that extends the traditional natural language inference (NLI) classification task by introducing a fourth class, presupposition, besides the original three. We release two datasets, PECaN and PGEN, each designed for model fine-tuning on its respective task. We fine-tune BERT (Devlin et al., 2019) and T5 (Raffel et al., 2020) on the PNLI classification task, and T5 on the presupposition generation task. We find that the accuracy of classification on the presupposition class tends to surpass that of the other classes. Regarding presupposition generation, we find that despite the limited amount of data used for fine-tuning, the model displays an emerging proficiency in generation presuppositions, adhering to systematic patterns that mirror valid strategies for presupposition generation.

Python in the speech sciences: a bioacoustician's perspective

Yannick Jadoul, Diandra Duengen, Bart de Boer, Andrea Ravignani

Sapienza University of Rome, Max Planck Institute for Psycholinguistics, Vrije Universiteit Brussel, Aarhus University & The Royal Academy of Music Aarhus/Aalborg

As the amount of collected research data and the importance of statistical and computational analyses grow, processing that data swiftly and efficiently becomes accordingly crucial in many scientific fields. Neither linguistics nor bioacoustics are exceptions to this trend, and just like in many other fields, being able to program in scripting languages such as Python or R to process and analyse data is now an essential skill.

In the speech sciences, and in particular in phonetics, the Praat software package has been and still is a key tool to analyse human speech. However, the wide range of acoustic algorithms implemented in Praat find use beyond the speech sciences: For example in the field of bioacoustics, where acoustic analyses such as estimating the fundamental frequency or the harmonics-to-noise ratio, are just as relevant as in phonetics research.

Over five years ago, the Python package Parselmouth was first released. Parselmouth provides easy and intuitive access to all Praat functionality from Python. It aims to make it easier to directly integrate this functionality with all the tools and libraries available for Python, and to enable new scientific workflows and experiments through direct, interactive access to Praat from Python.

In the years since, Parselmouth has been used in a variety of bioacoustics research projects, by us and other researchers. Here, we intend to give an overview of several such projects, ranging from batch processing and analysis of collected bioacoustics data, to a custom-written application which uses Praat and Parselmouth to live-track and visualise animal vocalisations during a behavioural experiment.

Our overview intends to give insight into the perhaps unexpected overlap between the methodology in bioacoustics and the speech sciences, and demonstrate the potential of Parselmouth to help develop new research and experiments in linguistics.

Using GPT4 for Conventional Metaphor Detection

Jiahui Liang, Stephan Raaijmakers, Aletta G. Dorst, Jelena Prokic
Universiteit Leiden; TNO, The Hague

Metaphor detection is a highly complex process, and requires high levels of abstraction by humans. Its challenges arise from several characteristics of linguistic metaphors, including:

- (1) The foundational role of contextual understanding
- (2) The support of shared cultural and social knowledge
- (3) The diversity among metaphor types

Among different types of metaphors, conventional metaphors account for 99% of linguistic metaphors in authentic discourse (Steen et al. 2010). Their metaphorical meanings have been lexicalized and normally go unnoticed in everyday usage. Some examples of conventional metaphors are:

- (1) Inflation is lowering our standard of life.
- (2) Don't waste your time.
- (3) Your claims are indefensible.

The emergence of Large Language Models (LLMs) creates new possibilities for metaphor detection and sub-type labelling. Recent research indicates that LLMs demonstrate superior performance in contextual semantic comprehension compared to previous generations of language models (Zhou et al. 2023). Prompting (or in-context learning) approaches appear useful techniques for the application of LLMs to NLP tasks (Chung et al. 2022).

In this project we explore the performance of GPT4 on the task of conventional metaphor detection with a subset of the VUAMC metaphor corpus (Steen et al. 2010). The evaluation is conducted under the following experimental settings:

1. Zero-shot prompting:
Inspecting what the model does “out of the box” when applied to the task of conventional metaphor detection.
2. N>0-shot prompting:
Providing N examples (prompts) with word-level labels indicating the participation of a word in a conventional metaphor.

We perform a detailed error analysis of outcomes on the VUAMC data, as compared to the available ground truth labeling. This analysis aims to extract linguistic information crucial for subsequent fine-tuning of LLMs on metaphor detection. Through evaluation, the project provides new insights into the impact of different LLM architectures and characteristics of training data on conventional metaphor detection.

References:

- Chung, H. W., Hou, L., Longpre, S., Zoph, B., Tay, Y., Fedus, W., Li, Y., Wang, X., Dehghani, M., Brahma, S., Webson, A., Gu, S. S., Dai, Z., Suzgun, M., Chen, X., Chowdhery, A., Castro-Ros, A., Pellat, M., Robinson, K., ... Wei, J. (2022, December 6). Scaling instruction-finetuned language models. *arXiv.org*.
- Steen, G. J., Dorst, A. G., Herrmann, J. B., Kaal, A. A., & Krennmayr, T. (2010). Metaphor in usage. *Cogl*, 21(4), 765–796.
<https://doi.org/10.1515/cogl.2010.024>
- Zhou, C., Li, Q., Li, C., Yu, J., Liu, Y., Wang, G., Zhang, K., Ji, C., Yan, Q., He, L., Peng, H., Li, J., Wu, J., Liu, Z., Xie, P., Xiong, C., Pei, J., Yu, P.S., & Sun, L. (2023, May 1). *A comprehensive survey on pretrained foundation models: A history from Bert to chatgpt*. *arXiv.org*. <https://arxiv.org/abs/2302.09419>

Parallel session 6

Processing Gender Stereotypes in the Bilingual Brain

Joanna Porkert, Anna Siyanova-Chanturia, Merel Keijzer

University of Groningen; Victoria University of Wellington

Simultaneous bilingual children have been found to show less racial bias than their monolingual peers (Singh et al., 2019; 2020), which was predicted by better cognitive flexibility (Singh et al., 2021). It raises the question whether this can also be found in young adults who are either simultaneous or sequential bilinguals, respectively, and whether other aspects of social cognition, such as gender stereotyping, can also be predicted by cognitive flexibility.

ERP research has shown that gender stereotypes are a relevant cue during language processing, such as in “Our aerobics instructor gave himself a break.” (p. 284, Osterhout et al., 1997). Findings have shown that participants perceive these types of violations as grammatical mistakes, reflected in a P600 effect (typically elicited for morphosyntactic violations).

This project aims to look at the relationship between cognitive flexibility (measured by a color-shape switch task) and gender stereotyping in simultaneous and sequential bilingual young adults with different L1 backgrounds. Furthermore, it seeks to examine individual processing patterns, as past gender stereotype studies found participants who score low on sexism tend to show reduced amplitudes in the course of the ERP experiment (Grant et al., 2020).

We tested 66 university students who were either Dutch or Spanish L1 speakers. All were sequential English L2 speakers, and around half were, in addition, Dutch-Frisian (n = 16), or Spanish-Catalan (n = 14) simultaneous bilinguals. The stimuli were English sentences with pronouns as critical words (e.g., “The lifeguard threw himself into the water.”).

First results indicate that the simultaneous bilinguals do not have higher cognitive flexibility. The post-task grammaticality judgement task of the stimuli sentences showed that the participants did not perceive the stereotypically incongruent sentences as more ungrammatical than the congruent sentences. The analysis of the ERP data is ongoing and will be included in a possible presentation.

References

- Grant, A., Grey, S., & van Hell, J. G. (2020). Male fashionistas and female football fans: gender stereotypes affect neurophysiological correlates of semantic processing during speech comprehension. *Journal of Neurolinguistics*, 53. <https://doi.org/10.1016/j.jneuroling.2019.100876>
- Singh, L., Moh, Y., Ding, X., Lee, K., & Quinn, P. C. (2021). Cognitive flexibility and parental education differentially predict implicit and explicit racial biases in bilingual children. *Journal of Experimental Child Psychology*, 204. <https://doi.org/10.1016/j.jecp.2020.105059>
- Singh, L., Quinn, P. C., Qian, M., & Lee, K. (2020). Bilingualism is associated with less racial bias in preschool children. *Developmental Psychology*, 56(5), 888-896. <https://doi.org/10.1037/dev0000905>
- Singh, L., Quinn, P. C., Xiao, N. G., & Lee, K. (2019). Monolingual but not bilingual infants demonstrate racial bias in social cue use. *Developmental Science*, 22(6). <https://doi.org/10.1111/desc.12809>

Task-evoked pupil response for voluntary, incentivised, and cued language-switching in Spanish-Basque bilinguals

Jimena González Sáez, Drew J. McLaughlin, Robert Hartsuiker

University of Groningen; Basque Center on Cognition, Brain and Language; University of Ghent

Switching between languages has been shown to incur cognitive costs for bilinguals. The extent of such costs, however, seems to at least partly depend on whether speakers are forced to switch languages or given the choice of when to switch. While prior research has primarily focused on language-switching in production (e.g., de Bruin et al., 2018; Gollan & Ferreira, 2009; Meuter & Allport, 1999), studies on language-switching in comprehension remain scarcer (e.g., Abutalebi et al., 2007; Fernández et al., 2019; Yacovone et al., 2021). Additionally, the potential effect of reward incentives on language-switching costs remains unknown, with just a few studies on how monetary rewards impact allocation of cognitive resources in a monolingual listening setting (Koelewijn et al., 2018; Kraus et al., 2023). We addressed these gaps by exploring language-switching costs among Spanish-Basque bilinguals in a two-sentence perception task. Participants were presented with different language combinations under cued (i.e., forced), voluntary, and incentivised (i.e., different language combinations rewarded with bonus money each trial) switching conditions. Language switching costs were measured using the task-evoked pupil response, a well-known index of cognitive effort (Beatty, 1982). Preliminary data indicates that the greatest pupil response was elicited in the cued condition, followed by the incentivised and voluntary conditions. Moreover, only the cued block appears to incur a language-switching cost (i.e., a difference in pupil response between switch and no-switch trials). These results are consistent with production studies finding greater difficulty (here reflected as higher cognitive effort) when language switching is cued as compared to voluntary. Further, we interpret the reduced language switching costs in the incentivised block as reflecting a boost in motivation related to the monetary incentives. By shedding light on the cognitive mechanisms underlying language switching and the potential effect of reward incentives, this study will contribute to our understanding of bilingual language processing.

References

- Abutalebi, J., Brambati, S.M., Annoni, J.M., Moro, A., Cappa, S.F., & Perani, D. (2007). The Neural Cost of the Auditory Perception of Language Switches: An Event-Related Functional Magnetic Resonance Imaging Study in Bilinguals. *The Journal of Neuroscience*, 27(50), 13762-13769. <https://doi.org/10.1523/JNEUROSCI.3294-07.2007>
- Beatty, J. (1982). Task-Evoked Pupillary Responses, Processing Load, and the Structure of Processing Resources. *Psychological Bulletin*, 91(2), 276-292.
- De Bruin, A., Samuel, A.G., & Duñabeitia, J.A. (2018). Voluntary language switching: When and why do bilinguals switch between their languages? *Journal of Memory and Language*, 103, 28-43. <https://doi.org/10.1016/j.jml.2018.07.005>
- Fernández, C.B., Litcofsky, K.A., & van Hell, J.G. (2019). Neural correlates of intra-sentential code-switching in the auditory modality. *Journal of Neurolinguistics*, 51, 17-41. <https://doi.org/10.1016/j.jneuroling.2018.10.004>
- Gollan, T.H., & Ferreira, V.S. (2009). Should I Stay or Should I Switch? A Cost-Benefit Analysis of Voluntary Language Switching in Young and Aging Bilinguals. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 35(3), 640-665. <https://doi.org/10.1037/a0014981>
- Koelewijn, T., Zekveld, A.A., Lunner, T., & Kramer, S.E. (2018). The effect of reward on listening effort as reflected by the pupil dilation response. *Hearing Research*, 367, 106-112. <https://doi.org/10.1016/j.heares.2018.07.011>
- Kraus, F., Obleser, J., & Herrmann, B. (2023). Pupil-size sensitivity to listening demand depends on motivational state. *eNeuro*, 10(12). <https://doi.org/10.1523/ENEURO.0288-23.2023>
- Meuter, R.F.I., & Allport, A. (1999). Bilingual Language Switching in Naming: Asymmetrical Costs of Language Selection. *Journal of Memory and Language*, 40, 25-40.
- Yacovone, A., Moya, E., & Snedeker, J. (2021). Unexpected words or unexpected languages? Two ERP effects of code-switching in naturalistic discourse. *Cognition*, 215, Article 104814. <https://doi.org/10.1016/j.cognition.2021.104814>

Attention Paid, Words Learned: Vocabulary Learning with Enhanced Subtitles

Vincent Fan, Charisti Styliara, Laura Fiche, Hanneke Loerts, Anastasia Pattemore

University of Groningen

Textually enhanced (TE) vocabulary in subtitles has been proposed as an effective strategy to use TV shows for language learners. TE has been shown to cause an increase in received visual attention and reading times (Puimège et al., 2023), which consequently, is expected to benefit incidental vocabulary learning (Godfroid et al., 2013). However, previous research has not considered how TE affects attention and learning over time. Given that, this study adopts a longitudinal design to investigate the effect of TE on vocabulary learning. Specifically, we intend to answer two questions: 1) To what extent does TE affect the distribution of visual attention towards enhanced target words over time? 2) How does this visual attention affect vocabulary learning?

Twenty-five participants with limited knowledge of Dutch were recruited to watch 13 episodes of the show *The Good Place* (Schur, 2016) with L2 English audio and L3 Dutch subtitles. They took Dutch vocabulary pre-/post meaning recall test that included 32 target words and 16 fillers to control for learning outside of the intervention. In the subtitles, half of the target words were enhanced and the other half not to explore the potential benefits of TE. The participants watched the first and last episodes with their eye movements recorded with EyeLink Portable Duo, and the rest of the episodes at home over a period of three weeks.

We use eye tracking metrics (pupil size, total reading time, first fixation duration, and fixation counts on the target words) as indicators of attention allocation, and pre-/post test comparison as a signal of learning. Although the data collection is still ongoing, a preliminary analysis showed a dilation in pupil size (a non-significant tendency) on the enhanced targets, compared to non-enhanced, suggesting an increased cognitive load while processing TE words.

References

- Godfroid, A., Boers, F., & Housen, A. (2013). An eye for words: Gauging the role of attention in incidental L2 vocabulary acquisition by means of eye-tracking. *Studies in Second Language Acquisition*, 35(3), 483-517.
- Puimège, E., Montero Perez, M., & Peters, E. (2023). Promoting L2 acquisition of multiword units through textually enhanced audiovisual input: An eye-tracking study. *Second Language Research*, 39(2), 471-492. <https://doi.org/10.1177/02676583211049741>
- Schur, M. (Creator). (2016). *The Good Place*. [TV series]. United States: Fremulon.

Parallel session 7

Two positions for viewpoint aspect below little v

Maarten Bogaards

Leiden University

It's generally assumed that viewpoint aspect (progressive, ingressive, continuative, etc.) is merged in one of two positions: above or below little v (e.g., Cinque 2001; Laca 2004; MacDonald 2011; Fukuda 2012; Harwood 2015). In this talk, I argue that there's an additional zone for viewpoint aspect within vP.

Evidence for this claim comes from variable coercion effects in Dutch, English and Mandarin Chinese (Bogaards 2024). Viewpoint aspect markers impose selectional restrictions with respect to situation type. Violations can often be resolved via coercion, also known as aspect shift (de Swart 1998). However, constructions marking the same aspectual viewpoint may vary in whether they allow coercion.

Take continuative aspect, which requires durative (i.e., non-Achievement) input. In Dutch, [blijven + V] allows coercion by iterative interpretation (1a), whereas [door + V] doesn't (1b), even though there's no discernible meaning difference.

- | | | |
|-----|---|---|
| (1) | a. Pieter bleef vertrekken.
'Pieter kept leaving.' | ⇒ Iterative coercion: Multiple 'leaving' events |
| | b. #Pieter vertrok door. | ⇒ No coercion possible |

Given that (1a)–(1b) don't differ semantically, the aim of this talk is to derive the contrast from syntax. I first point out that this type of contrast is also found in other languages (e.g., English keep vs. on and Mandarin jìxù 继续 'continue' vs. -xiaqu 下去) and across aspectual viewpoints. Then, using a set of syntactic diagnostics including long passive and object/particle climbing (Cinque 2001; Wurmbrand 2004), I show that the effects cannot be derived from merge above/below little v. Finally, working from an isomorphic mapping between situation type and VP syntax (Travis 2010; Sybesma 2021) combined with distributional evidence, I argue that coercion blocking is a reflex of merge within the decomposition of big VP. I conclude that there are two distinct zones for viewpoint aspect below little v: inner aspect and low outer aspect.

References: Bogaards, M. (2024). Syntax of Coercion. Poster presented at GLOW in Asia XIV, The Chinese University of Hong Kong, 8 March 2024. • Cinque, G. (2001). "Restructuring" and the order of aspectual and root modal heads. In: *Current studies in Italian syntax: Essays offered to Lorenzo Renzi*. Ed. by G. Cinque & G. Salvi. Leiden: Brill, 137–155. doi: 10.1163/9780585473949_009. • Fukuda, S. (2012). Aspectual verbs as functional heads: Evidence from Japanese aspectual verbs. *Natural Language & Linguistic Theory* 30 (4), 965–1026. doi: 10.1007/s11049-012-9171-7. • Harwood, W. (2015). Being progressive is just a phase: Celebrating the uniqueness of progressive aspect under a phase-based analysis. *Natural Language & Linguistic Theory* 33 (2), 523–573. doi: 10.1007/s11049-014-9267-3. • Laca, B. (2004). Romance "aspectual" periphrases: Eventuality modification versus "syntactic" aspect. In: *The Syntax of Time*. Ed. by J. Guéron & J. Lecarme. Cambridge, MA: MIT Press, 425–440. doi: 10.7551/mitpress/6598.003.0018. • MacDonald, J. (2011). The phrase structure of phase verbs: An initial contrastive analysis of English and Russian. *Acta Linguistica Hungarica* 58 (3), 261–27. doi: 10.1556/ALing.58.2011.3.4. • de Swart, H. (1998). Aspect shift and coercion. *Natural Language & Linguistic Theory* 16 (2), 347–385. doi: 10.1023/A:1005916004600. • Sybesma, R. (2021). Voice and little v and VO–OV word-order variation in Chinese languages. *Syntax* 24 (1), 44–77. doi:10.1111/synt.12211. • Travis, L. (2010). *Inner aspect: The articulation of VP*. Dordrecht: Springer. doi:10.1007/978-90-481-8550-4. • Wurmbrand, S. (2004). Two types of restructuring: Lexical vs. functional. *Lingua* 114 (8), 991–1014. doi: 10.1016/S0024-3841(03)00102-5.

Layered derivations and the unergative/unaccusative distinction

Marjolein Wietske Talsma

University of Groningen

Within the field of generative syntax, we take there to be local domains to which certain operations are restricted. Movement, for example, is restricted by locality.

The locality principle I'm adopting here, is that of layered derivations (Zwart 2011). Under this approach, material formed in one derivation can be included in the Numeration for the next derivation. The element's internal structure is then no longer accessible for syntactic operations and it behaves like an atom, giving rise to the desired locality effects.

The idea that certain material needs to be created in a separate derivation needs to be assumed independently of its locality function for any type of complex left branch material, such as complex subjects. These complex left branch elements form a constituent, something which would not follow if their components were merged directly into the main spine of the structure. We are therefore making use of a mechanism already part of the structure building operation instead of complicating our model with additional procedures (such as phases (Chomsky 2008)).

Predicates, I argue, are one of the elements built in a separate derivation. This captures their paradoxical nature: they have both lexical and syntactic properties. As Hale & Keyser put it: "the proper representation of predicate argument structure is itself a syntax" (1993:53), yet "all verbs are to some extent phrasal idioms" (1993:96).

It follows from the layered derivations approach that arguments cannot be generated within the predicate, contrary to what is traditionally assumed (see, for example Baker 1988, Koopman & Sportiche 1991). This holds important implications for unergatives and unaccusatives, two types of intransitives whose syntactic differences have traditionally been explained by assuming different base positions of their subjects within the predicate. In this talk, I discuss how we can capture the unergative/unaccusative distinction under a layered derivations approach.

References

- Baker, Mark Cleland. 1988. *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.
- Chomsky, Noam. 2008. On phases. *Current Studies in Linguistics Series* 45. 133.
- Hale, Ken & Samuel Jay Keyser. 1993. On argument structure and the lexical expression of syntactic relations. In Ken Hale & Samuel Jay Keyser (eds.), *The view from building 20: Essays in linguistics in honor of Sylvain Bromberger*, 53–109. Cambridge, MA: MIT press.
- Koopman, Hilda & Dominique Sportiche. 1991. The position of subjects. *Lingua* 85. 211–258.
- Zwart, Jan-Wouter. 2011. Recursion in language: A layered-derivation approach. *Biolinguistics* 5(1-2). 43–56.

A reassessment of Mandarin Universal Quantificational Expressions *mei* vs. *suoyou*

Zeqi Zhao, Gautam Ottur

University of Göttingen

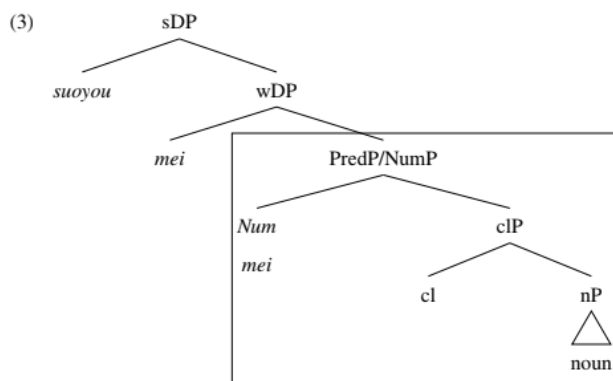
One prominent issue in the study of Universal Quantificational expressions (UQs) in Mandarin is that their occurrence is restricted in a way not observed for similar expressions in English. *mei*, traditionally translated as ‘every’, must combine with a bare numeral phrase (with the structure NU-MERAL-CLASSIFIER-N). *suoyou*, roughly the counterpart of ‘all’, only attaches to bare nouns, option-ally mediated by the linker -de. In pre-verbal positions, *mei*+NumP and *suoyou*+N are canonically licensed by *dou*, a morpheme whose function is subject to some debate.

- (1) *mei*-(*yi*)-*ge*/*suoyou* *haizi* (**dou*) *qu-le* *gongyuan*
 mei-one-CLF/*suoyou* child DOU go-PRF park
 ‘Every child/ All (of the) children went to the park.’

It has been noted, however, that subject *mei*+NumPs are also licensed without *dou* when there is a bare numeral phrase in the object position as in (2a) (first observed by Huang 1996). When the subject contains *suoyou*+N (2b), *dou* is always obligatory.

- (2) a. *mei*-(*yi*)-*ge* *haizi* (*dou*) *hua-le* *yi-fu-hua*
 every-one-CLF child DOU draw-PRF one-CLF-picture
 ‘Every child drew one picture.’
 b. *suoyou* *haizi* (**dou*) *hua-le* *yi-fu-hua*
 suoyou child DOU draw-PRF one-CLF-picture
 ‘All (of the) children drew one picture.’

These observations have sparked considerable interest in (i) what licenses two different kinds of subject UQs and (ii) how. In this talk, we argue that the distinct licensing conditions of *mei* and *suoyou* arise because of their different positions at DP layers (under the general assumption that the syntax of the extended nominal domain reflects its semantic composition). Based on the nominal structure proposed by Cheng et al. (2017) wherein the two types of definiteness correspond to a s(trong)DP and a w(eak)DP respectively, we propose that *mei* and *suoyou* are superlative degree morphemes (Hallman 2016) occupying different D heads. We further argue that *mei* is semantically a type-lifted derivative of *suoyou*.



References

- Cheng, L. L.-S., Caroline, H., Zamparelli, R., et al. (2017). Two levels for definiteness. In *Proceedings of GLOW in Asia XI*, volume 1, pages 79–93. MIT Press.
- Hallman, P. (2016). 'all' and 'every' as quantity superlatives. In *Semantics and linguistic theory*, pages 506–525.
- Huang, S.-Z. (1996). *Quantification and predication in Mandarin Chinese: A case study of dou*. University of Pennsylvania.

Adverbs, arguments, and well-mannered pronominals

Lex Cloin-Tavenier

Utrecht University

Manner modification is typically optional, witness the manner adverb (henceforth MA) *poorly* in (1). However, manner modification can be obligatory; MAs are obligatory in English middles (2a). The MA in (2b) is omissible, but this does not change the meaning of (2b), suggesting manner modification takes place covertly/semantically.

(1) *She sings (poorly).*

(2) a. *This book reads *(easily).*

b. *She behaves (herself) (well).*

Syntactic contexts of obligatory manner modification often exhibit SE/self-pronominals (2-3). The ways in which the presence/optionality of the MA and pronominal covary differs across contexts and languages.

(3) a. *Dit boek leest *(*zich) *(makkelijk).*

Heerlen Dutch | S(standard)D(utch)

this book reads SE easily

b. *Zij gedraagt *(zich) (goed).*

SD

she behaves SE good

(Cross-linguistic variation in) the relation between manner modification, MAs, and SE/self-pronominals has not been studied. I explore what these cross-linguistic patterns reveal about manner modification, and the distribution of MAs and pronominals. Data come from English, Italian, Dutch, German, and French.

I discuss the following questions:

i) Why is manner modification obligatory in some structural contexts, but not others?

ii) Why do the structural contexts of obligatory manner modification often feature SE/self-pronominals, but not always?

iii) What governs variation in omissibility of MAs across structural contexts and languages?

I hypothesize that:

i) Manner modification is obligatory in middles and inherent reflexives as it facilitates recovery of a suppressed/implicit argument (cf. Hoekstra and Roberts (1993), and Lekakou (2005). Middles and inherent reflexives have a (c)overt manner modifier.

ii) SE/self-pronominals emerge when covert identification of the argument roles of the verb and manner modifier does not suffice to recover the suppressed/implicit argument. Which structural contexts necessitate such pronominal support differs across languages, modulo cross-linguistic differences in pronominal systems (e.g., Lekakou, 2005).

iii) Omissibility of MAs is possible in case it does not lead to structural ambiguity.

References.

Hoekstra, T., & Roberts, I. (1993). Middle constructions in Dutch and English. In *Knowledge and Language: Lexical and Conceptual Structure* (Vol. 2, pp. 183–220). Kluwer Academic Publishers.

Lekakou, M. (2005). *In the Middle, Somewhat Elevated: The semantics of middles and its crosslinguistic realization*. University College London.

Parallel session 8

The neural architecture of word learning: A study in developmental language disorder
Cheyenne Svaldi, Branislava Curcic-Blake, Julie Tseng, Kim Vos, Aliene Reinders, Roel Jonkers, Vânia de Aguiar
University of Groningen; The Hospital for Sick Children, Canada

Background. Word learning impairments are observed in several pediatric populations. Yet, the neural correlates of verbal learning and verb learning have been scarcely or not researched in children. This study investigated the white matter correlates of word learning in children with developmental language disorder (DLD), a population with consistent verbal and verb learning impairments. *Method.* A preliminary analysis was conducted, including 10 children with DLD (M(SD) = 9;6(1;4) years) and nine typically developing children (M(SD) = 10;0(1;3) years) between eight and 13 years of age. Dorsal (e.g., arcuate fasciculus) and ventral (e.g., uncinate fasciculus) language tracts and white matter of the cerebellar peduncles were modeled. Word learning performance was assessed using a verbal (list) learning task and a newly developed verb learning task. Because of the inconsistency in the literature regarding white matter differences in DLD, fixel-based analysis was applied to the diffusion data to increase the biological specificity of our findings. Fixel-based metrics of the informative tracts (> 50 significant fixels) were correlated with word learning performance. *Results.* Children with DLD showed an increased fiber density and fiber density cross-section in the left middle longitudinal and right arcuate fasciculus, and a decrease in these metrics in the left arcuate and right superior longitudinal fasciculus (part III). Further, increased fiber density in the right arcuate fasciculus was negatively correlated with immediate total recall on the verbal learning task. *Discussion and conclusion.* Our findings suggest that fixel-based analysis is a promising technique to model white matter in pediatric clinical populations and may identify neural correlates of reduced language performance. Further, the white matter differences in DLD may be attributed to microstructural differences in axonal count or density and atypical structural properties of the right arcuate fasciculus may contribute to the observed verbal learning impairments in this population, particularly during encoding.

Grey matter correlates of verbal learning in children with Developmental Language Disorder and typically developing children

Vânia de Aguiar, Juan-Ignacio Galli, Cheyenne Svaldi, Kim Vos, Aliene Reinders, Annet Kingma, Branislava Ćurčić-Blake, Roel Jonkers

University of Groningen; University Medical Centre Groningen; National University of Mar del Plata; National Scientific and Technical Research Council

Background. Verbal learning is associated with lexical knowledge, and important to continuous building of vocabulary. Vocabulary size, in turn, predicts academic success. Children with DLD show impaired verbal learning, while presenting only mild and diffuse anatomical abnormalities. This makes them a good test case to examine which regions support verbal learning in children. However, the neural correlates of these difficulties have not been fully identified. In the current study, neural correlates of verbal learning and memory are reported in a sample of typical developing children and children with language disorder (DLD).

Method. Children with DLD (n=10) and typically developing controls (n=5) completed an auditory verbal learning test (the 15-word test). T1-weighted volume scans were acquired using a standard MPAGE sequence. Freesurfer was used to extract cortical thickness measures for 12 frontotemporoparietal regions of interest, selected based on their role in language processing and verbal learning or on showing atypical structure in children with DLD. In preliminary data analyses, correlations were calculated between cortical thickness and verbal learning measures (encoding total score, delayed recall, recognition). Further data collection is ongoing.

Results and discussion. Preliminary analyses show significant correlations between the total acquisition score of the 15-word test and cortical thickness in the supramarginal gyrus and the transverse temporal gyrus (Heschl's gyrus), and a relation between delayed recall and thickness of the inferior frontal gyrus. Voxel-based analyses will be conducted with a larger sample (n=25 per group), to study the relation between verbal learning and cortical thickness while focusing particularly on regions where we identify differences between TD children and children with DLD. These results will help identify supratentorial brain regions involved in cognitive functions which support vocabulary development.

An Intraoperative Language Test for Awake Brain Surgeries: German Text- to-Picture Semantic Association Task (GTP-SAT)

Nikki Hoekzema, Lena Rybka, Katharina Faust, Peter Vajkoczy, Thomas Picht, Adrià Rofes
University of Groningen; Charité – Universitätsmedizin Berlin

Introduction: Awake brain surgery is the gold standard for the resection of gliomas in eloquent brain areas.^{1,2,3} The main goal of awake brain surgery is to maximize tumour resection and minimize postoperative (language) deficits.^{2,4} Nowadays, object naming (i.e., naming pictures) is a typically employed task during intraoperative language testing in awake brain surgeries.⁵ However, individuals with a brain tumour still suffer from post-operative word finding deficits due to impairments on multiple levels of language processing, including language comprehension.^{6,7,8} Therefore, an intraoperative test tapping into language comprehension processes is necessary. Such a test is not yet available in German.

Aims: The aim of the project is to design, standardize, and validate an intraoperative language task assessing language comprehension, in particular regarding thematic and taxonomic relations of the semantic system: the German Text-to-Picture Semantic Association Task (GTP-SAT).

Methods: The GTP-SAT was piloted in 10 native German control speakers and standardized in 45 control speakers of three age groups (18 – 29 years, 30 – 44 years and 45 – 59 years) with different years of education. Additionally, the GTP-SAT is being validated in 10 individuals with a brain tumour in language related brain areas. To evaluate positive validity,⁹ the comprehension task of the Aachen Aphasia Test (AAT)¹⁰ will be administered, and to evaluate the negative validity,⁹ the Digit Span Task¹¹ assessing working memory will be administered.

Preliminary Results: Based on a prior study for Dutch,¹² we expect the GTP-SAT to be a sensitive tool for identifying different semantic processing deficits. This expectation is supported by the preliminary results, which show a worsened performance on the GTP-SAT in individuals with a brain tumour in eloquent brain areas compared to control speakers.²

References

- ¹Berger, M. S., & Ojemann, G. A. (1992). Intraoperative brain mapping techniques in neuro-oncology. *Stereotactic and Functional Neurosurgery*, 58, 153-161.
- ²Duffau, H., Capelle, L., Sichez, J.-P., Faillot, T., Abdenour, L., Law Koune, J. D., ... & Fohanno, D. (1999). Intra-operative direct electrical stimulations of the central nervous system: the Salpêtrière experience with 60 patients. *Acta Neurochirurgica*, 141, 1157-1167.
- ³De Witt Hamer, P.C., Robles, S.G., Zwinderman, A.H., Duffau, H., & Berger, M.S. (2012). Impact of intraoperative stimulation brain mapping on glioma surgery outcome: A meta-analysis. *Journal of Clinical Oncology*, 30, 2559–2565.
- ⁴Taylor, M. D., & Bernstein, M. (1999). Awake craniotomy with brain mapping as the routine surgical approach to treating patients with supratentorial intra axial tumors: a prospective trial of 200 cases. *Journal of Neurosurgery*, 90, 35-41.
- ⁵De Witte, E., & Mariën, P. (2013). The neurolinguistic approach to awake surgery reviewed. *Clinical Neurology and Neurosurgery*, 115(2), 127–145.
- ⁶Davies, K.G., Bell, B.D., Bush, A.J., Hermann, B.P., Dohan, F.C., & Jaap, A.S. (1998). Naming decline after left anterior temporal lobectomy correlates with pathological status of resected hippocampus. *Epilepsia*, 39, 407–419.
- ⁷Langfitt, J.T., & Rausch, R. (1996). Word-finding deficits persist after left anterotemporal lobectomy. *Archives of Neurology*, 53, 72–76.
- ⁸Wilson, S.M., Lam, D., Babiak, M.C., Perry, D.W., Shih, T., Hess, C.P., Berger, M.S., & Chang E.F. (2015). Transient aphasia after left hemisphere resective surgery. *Journal of Neurosurgery*, 123(3), 581-93.

- ⁹Rofes, A., de Aguiar, V., & Miceli, G. (2015a). A minimal standardization setting for language mapping tests: an Italian example. *Neurological Sciences*, 36, 1113-1119.
- ¹⁰Huber, W., Poeck, K., & Willmes, K. (1984). The Aachen Aphasia Test. *Advances in Neurology*, 42, 291–303
- ¹¹Drozdzick, L. W., Wahlstrom, D., Zhu, J., & Weiss, L. G. (2012). The Wechsler Adult Intelligence Scale—Fourth Edition and the Wechsler Memory Scale—Fourth Edition. In D. P. Flanagan & P. L. Harrison (Eds.), *Contemporary intellectual assessment: Theories, tests, and issues*, 197–223. New York City, NY: The Guilford Press.
- ¹²Svaldi, C. (2020). The Text-to-Picture Semantic Association Task (TP-SAT): standardization, validation and application in people with a brain tumour. [*Master thesis, University of Groningen*].

Syntactic and Morphological Complexity across Discourse Tasks in Spanish Aphasia

Jorge Ricardo Hidalgo Chagoya, Roel Jonkers, Simona Mancini

University of Groningen; Basque Center for Cognition, Brain and Language

Background. Four elicitation genres of discourse have been identified (Bryant et al., 2016): expository or descriptive, narrative, procedural, and conversational. Remarkably, Stark (2019) demonstrated that each monologic genre elicits unique linguistic information in people with aphasia and non-brain damaged individuals. Leaman and Edmonds (2023) extended the analysis to the conversational genre, and equally found significant differences. This scientific literature has demonstrated differences across discourse tasks in syntactic proxies and morphological errors in the English language. Thus, the present research will attempt to answer: What task is more sensitive in detecting syntactic and morphological complexity deficits in the discourse of Spanish speakers with aphasia?

Intended Method. 25 participants with post-stroke aphasia and 25 non-brain damaged individuals have answered to five discourse tasks, which cover all four elicitation genres. After preprocessing the transcripts, I will use CLAN (MacWhinney, 2000) to extract the primary linguistic variables, syntactic structures (a syntax complexity metric; Agmon et al., 20124), number of morphosyntactic errors, a count of correct morphological inflections, and an inflectional index (Bastiaanse et al., 1996). ANCOVAs and post-hoc tests will be used in order to assess differences between the performance of both groups in the five tasks.

Expected Results. Following findings from previous research (de Lira et al., 2011; Garrard & Forsyth, 2010; Stark, 2019; Stark & Fukuyama, 2021), it is expected that both the narrative and conversational genre will be the most sensitive to detect morphological and syntactic complexity differences between the groups.

Relevance. This line of inquiry follows Boschi and colleagues' (2017) recommendation of designing studies with the aim of identifying the most suitable tasks for specific aims in clinical populations. It is particularly relevant since most studies examining morphosyntactic markers in connected speech are carried out in the morphologically poor English language. Hopefully, the present research will help guide clinicians and researchers in effectively and accurately assessing complexity with discourse tasks.

References.

- Agmon, G., Pradhan, S., Ash, S., Nevler, N., Liberman, M., Grossman, M., & Cho, S. (2024). Automated measures of syntactic complexity in natural speech production: Older and younger adults as a case study. *Journal of Speech, Language, and Hearing Research*, 1-17. https://doi.org/10.1044/2023_JSLHR-23-00009
- Bastiaanse, R., Jonkers, R., & Moltmaker-Osinga, U. (1996). Aspects of lexical verbs in the spontaneous speech of agrammatic and anomic patients. *Language and Cognition*, 5, 13-26.
- Bryant, L., Ferguson, A., & Spencer, E. (2016). Linguistic analysis of discourse in aphasia: A review of the literature. *Clinical Linguistics & Phonetics*, 30(7), 489-518. <https://doi.org/10.3109/02699206.2016.1145740>
- de Lira, J. O., Ortiz, K. Z., Campanha, A. C., Bertolucci, P. H. F., and Minett, T. S. C. (2011). Microlinguistic aspects of the oral narrative in patients with Alzheimer's disease. *Int. Psychogeriatr.* 23, 404-412. doi: 10.1017/S1041610210001092
- Garrard, P., and Forsyth, R. (2010). Abnormal discourse in semantic dementia: a data-driven approach. *Neurocase* 16, 373-389. doi: 10.1080/13554791003785901
- Leaman, M. C., & Edmonds, L. A. (2023). Analyzing language in the picnic scene picture and in conversation: The type of discourse sample we choose influences findings in people with aphasia. *American Journal of Speech-Language Pathology*, 1-18. https://doi.org/10.1044/2023_AJSLP-22-00279
- MacWhinney, B. (2000). *The CHILDES Project: Tools for Analyzing Talk* (3rd ed.). Lawrence Erlbaum Associates. <https://doi.org/10.21415/T5B97X>
- Stark, B. C. (2019). A comparison of three discourse elicitation methods in aphasia and age-matched adults: Implications for language assessment and outcome. *American Journal of Speech-Language Pathology*, 28(3), 1067-1083. https://doi.org/10.1044/2019_AJSLP-18-0265
- Stark, B. C., & Fukuyama, J. (2021). Leveraging big data to understand the interaction of task and language during monologic spoken

discourse in speakers with and without aphasia. *Language, Cognition and Neuroscience*, 36(5), 562-585.
<https://doi.org/10.1080/23273798.2020.1862258>

Workshops

Becoming a LinkedIn expert

Hosted by Marjolein te Winkel (Science communication advisor at the Faculty of Arts of the University of Groningen)

LinkedIn is the ultimate online platform for swiftly connecting with others, whether they're fellow professionals or individuals outside your field. This makes LinkedIn an invaluable space for science communication. How do you create a professional profile that authentically represents you? How can you establish yourself as an expert and amplify your visibility? And how can you leverage LinkedIn to bring your research to the attention of a wider audience?

This workshop is suitable for anyone keen to explore the potentials of LinkedIn and promote their research to their target audience. No prior experience is necessary to participate.

LaTeX

Hosted by Thijs Janzen (Scientific Programmer at Theoretical Research in Evolutionary Life Sciences Department, GELIFES institute, Faculty of Science and Engineering)

You may have heard of people using LaTeX to write their manuscripts or their Thesis, but why use LaTeX at all?

And how to get started using LaTeX? In this workshop, I will take you by the hand into the wonderland of LaTeX.

We will explore the pros and cons of LaTeX and identify scenarios where the use of LaTeX will simplify your (writing) life.

The aim of the workshop is to be able to make an educated choice on using LaTeX for your (future) writing projects.

Poster sessions

Thursday 13 June

Hao-Yun Chuang	What Leads You to Comment? Pre-publication Prediction of the Online News Popularity on PTT Gossiping
Reihaneh Amooie	Automatic Speech Recognition (ASR) for Low-Resource Languages and Settings: A Systematic Literature Review
Maria Goncharova	Harbour seals can articulate to modulate formants
Valerie Querner	“You’re My Favorite Rapper Now” The Prosodic Characteristics of Sarcasm in Childish Gambino’s Speech, Rap, and Singing
Jiske Yonne Vos	Assessing the size of tongue movements before and after surgery for lateral tongue tumor
Silvia Lilli	Creativity, invention, and linguistic analysis: A case study
Rida Ahmed	Language processing in posterior fossa tumour patients: Psycholinguistic insights into the picture naming task
Ayesha Areej	Assessing Verb Retrieval in Urdu-Speaking People with Aphasia: A Spontaneous Speech Analysis
Elisa Gottardi	Preoperative and Postoperative Assessment of Word-Finding Difficulties in Italian Pediatric Patients with Posterior Fossa Tumors
Ashiru Yusuf Adamu	The conceptual state of boundedness in Hausa
Gautam Ottur	Syntactic category inventories and adpositionality in Dravidian
Maik Thalmann	On universal presupposition projection from attitude predicates
Tosca van Rooy	Word prediction in preschoolers: an eye-tracking study
Angelica Zordan	Compound processing: An eye-tracking study on Italian adolescents with developmental dyslexia

BOOK OF ABSTRACTS

Danique Combee	Two languages, one self: the interplay of Big Five traits and Dutch-English bilingual expression
Matthias Reiner	The role of context and morphosyntactic cues in the interpretation of wh-questions
Dora Savoldi	Possible Implications of a Tukano Language Ontology for Linguistic Analysis
Jelle Kisjes	Motor skills in children with Developmental Language Disorder and language skills in children with Developmental Coordination Disorder: a systematic review
Aliene Reinders	Psycholinguistic evaluation of narrative language in children with pediatric Posterior Fossa Tumors: an analysis of data of the European study of CMS

Friday 14 June

Floris Nijhuis	Evaluating the Hollandic expansion: dialectal translations of huis and muis across time
Luisa Fernanda Velásquez Vallejo	Modern Colonial Discourses: The Israeli Weaponization of LGBT Rights on Social Media
Eva van Kampen	I'm Switching Instruments When I Sing in English: Eivør's Prosodic Variation in L1 Faroese and L2 English Music and Speech
Francisca Duarte Santos Mendes Reis	Unravelling Age-Related Changes in Auditory-Vocal-Motor Control of Loudness in Zebra Finches
Shuyoa Li	L2 English Rhythm Production by Dutch and Chinese English Learners: Does musical ability also play a role?
Mercy Oluwaseyi Agbeye	Investigating the noun-verb dissociations in the pre-operative narrative speech samples of English-speaking children with posterior fossa tumors
Logan Gaudet	The use of graph theory metrics in assessing lexico-semantic impairment following awake brain surgery
Madeline Ladore	Mobile Negation in Western Armenian

Tess Wensink	The L1 Acquisition of French c'est-clefts: Evidence for Inward-Growing Syntactic Maturation
Zarina Levy-Forsythe	Against the masses: Experimental evidence for non-uniform noun semantics in a classifier language
Özlem Yeter	Theory of mind skills enhance children's ability to detect lies
Roos Weijers	The role of case marking and DP structure in the interpretation and processing of wh-questions in children
Jennifer Jost	Does language-specific experience influence the relational knowledge of compound words?
Loes van Heuvel	Comprehension of deictic pronouns in Dutch-speaking adults with autism spectrum disorder
Michelle Leegsma	Willingness to communicate and perceived proficiency levels in English: Exploring the role of Communication Strategies among Students
Sanne Kleefman	Does reading words aloud in L1 and L2 affect memorization? Evidence from event-related potentials
Hannah Thaens	Why English Children's Comprehension of Why-questions Precedes Production: An Optimality Theory Approach
Wansu Zhu	The melody of a question: Exploring interrogative prosody across Dutch, Romanian and Mandarin
Ma Xinyi	Comparative Study on Vowel Articulation: Mandarin-English Learners vs. Native English Speakers Using Praat

Maps

General information

The conference will take place in two university buildings in the city centre:

Academy Building

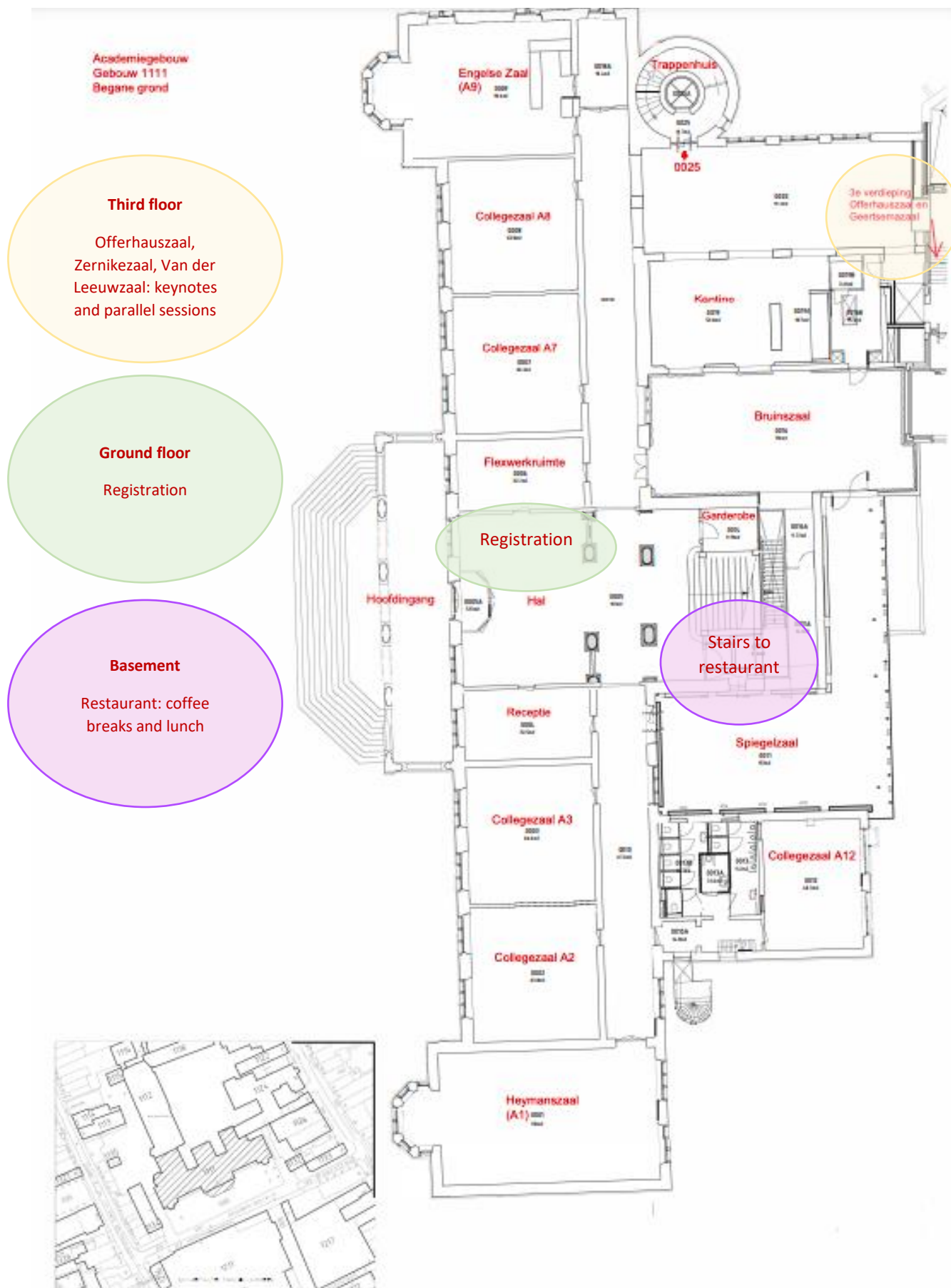
Broerstraat 5

9712 CP Groningen

Harmony Building

Oude Kijk in 't Jatstraat 26

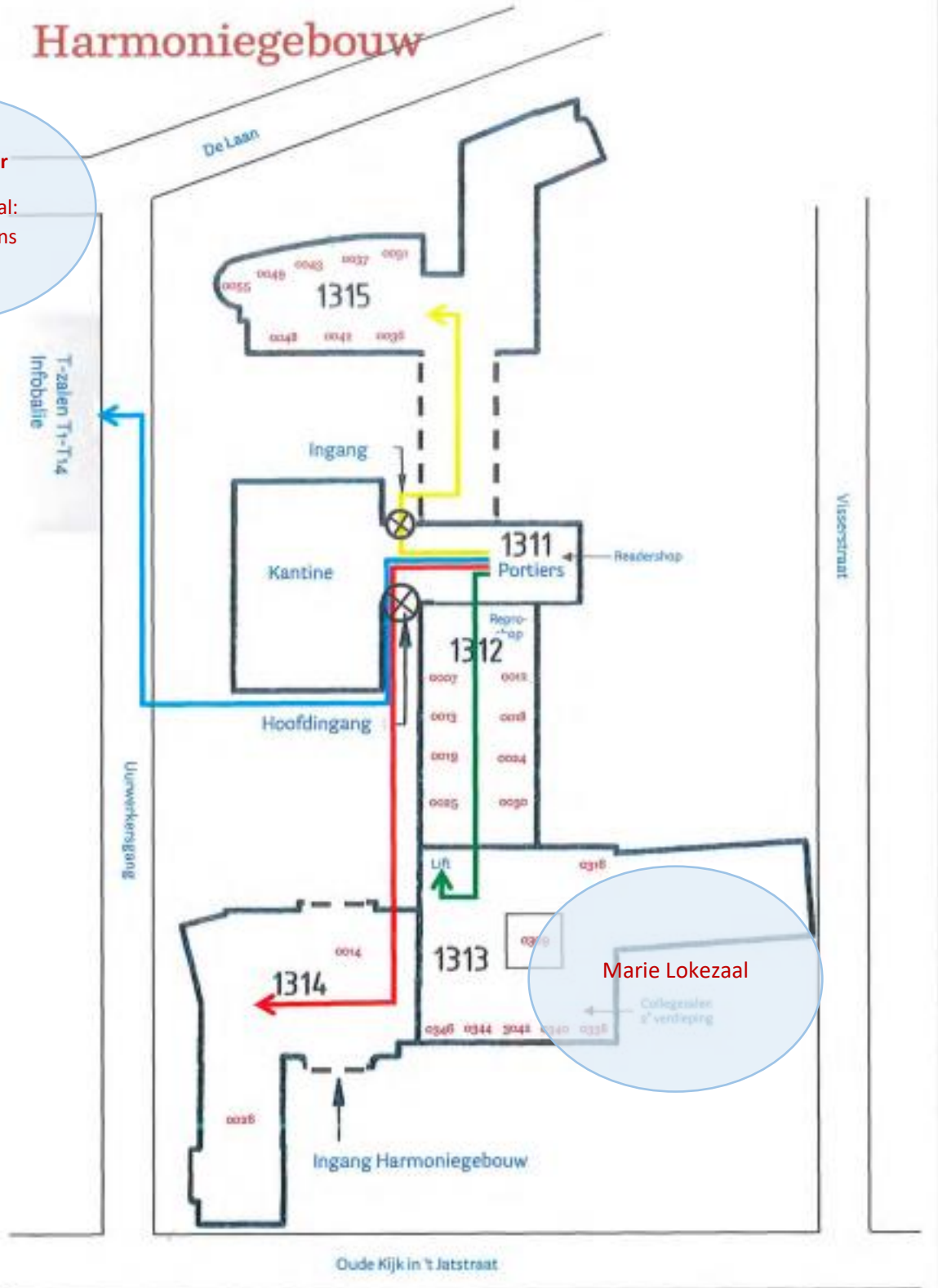
9712 EK Groningen



Harmoniegebouw

Ground floor

Marie Lokezaal:
poster sessions



Food & Drinks

Conference dinner

The conference dinner will be hosted at Tekinev on the 13th of June at 18:00. The restaurant will serve us vegan Turkish food.

Address:

Tekinev
Gelkingestraat 24
9711 NC Groningen

Closing drinks

Closing drinks will be on the 14th of June at 16.30 at De Uurwerker. It's very close to the Academy building, and it offers a wide range of drinks you can choose from to relax together with your colleagues after two intense days of linguistics!

Address:

De Uurwerker
Uurwerkersplein 1
9712 EJ Groningen