

university of groningen

INTERNATIONAL LINGUISTICS CONFERENCE





Welcome to TABU DAG 2019!

Dear TABU Dag participant,

We are pleased to welcome you to the 40th edition of the TABU Dag International Linguistics Conference at the University of Groningen! Organised by the Center for Language and Cognition Groningen (CLCG), TABU Dag is a broad conference that welcomes researchers from all sub-fields of linguistics. This format allows both scholars to be exposed to and learn about linguistic research outside their own field of expertise, facilitating innovation and collaboration. Encouraging graduate students and postdoctoral researchers to present their work alongside senior researchers, TABU Dag has for 39 years provided a place for both young and established scholars to exchange ideas and be inspired by each other.

For the celebratory 40th edition of TABU Dag, we have compiled a varied programme with oral presentations as well as poster presentations. As in previous years, poster presenters will briefly present their research with a short pitch. We are pleased to welcome delegates from as many as 20 countries, presenting talks and posters on topics in language acquisition, phonetics, psycholinguistics, discourse analysis, cognitive science, and various other linguistic fields. Additionally, we welcome the following keynote speakers of TABU Dag 2019:

- Kirsten Abbot-Smith (University of Kent)
- Neil Cohn (Tilburg University)
- Jan Hulstijn (University of Amsterdam)
- Courtenay Norbury (University College London)
- Martin Pickering (University of Edinburgh)
- Lucia Specia (Imperial College London, University of Sheffield)

+31 (0) 628 196 837 (Teja Rebernik)

We are very grateful to our sponsors and the Center for Language and Cognition Groningen for making this conference possible, and we wish you a very enjoyable and productive TABU Dag 2019!

Yours sincerely,

Contact 2:

Janine Strandbe Teja Rebernik	rg Vera Hukker Mara van der Ploeg	Penny Heisterkamp Iris Scholten	Martijn Wieling Xu Xiao
Contact details:			
E-mail:	tabudag @ rug.nl		
Website:	www.tabudag.nl		
Contact 1:	+31 (0) 643 850 053 (Janine S	trandberg)	



IPSKAMP *printing*

books and more



NOTaS





CLARIAH taal:





rijksuniversiteit groningen groninger universiteitsfonds









textkernel Semantic Recruitment Technology

unie



LOT

Netherlands Graduate School of Linguistics







/instituut voor de Nederlandse

Taalwetenschap

taal/

CITY MAP GRONINGEN



CITY MAP GRONINGEN







Academy Building Broerstraat 5, 9712CP Groningen



Harmony Building Oude Kijk in 't Jatstraat 26, 9712EK Groningen





O Groningen Central Station, 9726 AE Groningen

Academy Building, Broerstraat 5, 9712 CP Groningen

Harmony Building, Oude Kijk in het Jatstraat 26, 9712 EK Groningen Louis XV, Oude Kijk in het Jatstraat 47, 9712 EC Groningen



THURSDAY 20 JUNE

8:00 - 9:00	[Academy Building, Bruins:	zaal]		
	CONFERENCE REGISTRATION Coffee, tea			
9:00 - 9:15	[Academy Building, Geerts	emazaal]		
	WELCOME			
9:15 –10:15	[Academy Building, Geerts	emazaal]		
	JAN HULSTIJN Proximate and Ultimate Explanations of Individual Differences in Language Use and Language Acquisition			
10:15 -10:45	[Academy Building, A7]	[Academy Building, Zernikezaal]	[Academy Building, A12]	
	Daan van Soeren, Robert de Jonge The Communicative Role of Lexical Stress in Columbia School Phonology	Amélie la Roi, Simone Sprenger, Petra Hendriks Language in the Aging Brain: Using ERPs to Study Idiom Processing across the Life Span	Sophie Willimann Subject Omission in Spontaneous Commentaries	
10:45 - 11:15	[Academy Building, A7]	[Academy Building, Zernikezaal]	[Academy Building, A12]	
10:45 – 11:15	[Academy Building, A7] Louis Hendrix Perceptual Sensitivity to Tonal Alignment for L1 Speakers of Spanish (and Shilluk)	[Academy Building, Zernikezaal] Philippine Geelhand, Gaétane Deliens, Mikhail Kissine Judgments of Spoken Discourse and Impression Formation of Adults with Autism Spectrum Disorder	[Academy Building, A12] Rahel Oppliger Diversity of Head Nouns in Referential Communication: Same- type vs. Mixed-type Sets of Stimuli	
10:45 – 11:15 11:15 – 11:30	Louis Hendrix Perceptual Sensitivity to Tonal Alignment for L1 Speakers of Spanish (and	Philippine Geelhand, Gaétane Deliens, Mikhail Kissine Judgments of Spoken Discourse and Impression Formation of Adults with Autism Spectrum	Rahel Oppliger Diversity of Head Nouns in Referential Communication: Same- type vs. Mixed-type Sets of	
	Louis Hendrix Perceptual Sensitivity to Tonal Alignment for L1 Speakers of Spanish (and Shilluk) BREAK (15 min)	Philippine Geelhand, Gaétane Deliens, Mikhail Kissine Judgments of Spoken Discourse and Impression Formation of Adults with Autism Spectrum Disorder	Rahel Oppliger Diversity of Head Nouns in Referential Communication: Same- type vs. Mixed-type Sets of	
11:15 – 11:30	Louis Hendrix Perceptual Sensitivity to Tonal Alignment for L1 Speakers of Spanish (and Shilluk) BREAK (15 min) Coffee, tea	Philippine Geelhand, Gaétane Deliens, Mikhail Kissine Judgments of Spoken Discourse and Impression Formation of Adults with Autism Spectrum Disorder	Rahel Oppliger Diversity of Head Nouns in Referential Communication: Same- type vs. Mixed-type Sets of	
11:15 – 11:30	Louis Hendrix Perceptual Sensitivity to Tonal Alignment for L1 Speakers of Spanish (and Shilluk) BREAK (15 min) Coffee, tea [Academy Building, Geerts KIRSTEN ABBOT-SMITH	Philippine Geelhand, Gaétane Deliens, Mikhail Kissine Judgments of Spoken Discourse and Impression Formation of Adults with Autism Spectrum Disorder emazaal]	Rahel Oppliger Diversity of Head Nouns in Referential Communication: Same- type vs. Mixed-type Sets of	



13:30 - 14:00 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A12] Janine A. E. Strandberg Globalisation in Linguistic Landscapes: Nordic Language Mimicry in Mobile Signs Sybren Spit, Sible Andringa, Judith Rispens, Kindergarteners' Statistical Learning is Influenced by Instruction Linda Badan 14:00 - 14:30 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A12] 14:00 - 14:30 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A12] 14:00 - 14:30 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A12] 14:00 - 14:30 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A12] 14:00 - 14:30 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A12] 14:00 - 14:30 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A12] 14:30 - 15:00 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A12] Folajimi Oyebola Attitudes of Nigerians towards BBC Pidgin Elena Liveen Anna Theakston Function and Frequency: An Investigation into Children's Comprehension of Complex Causal and Conditional Sentences. [Academy Building, A12] 15:00 - 16:30 BREAK (30 min) move to Harm				
Globalisation in Linguistic Landscapes: Nordic Language Mimicry in Mobile Signs Sible Andringa, Judith Rispens, Enoch Aboh Linda Badan 14:00 – 14:30 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A12] 14:00 – 14:30 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A12] 14:00 – 14:30 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A12] 14:00 – 14:30 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A12] 14:00 – 14:30 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A12] 14:00 – 14:30 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A12] 14:30 – 15:00 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A12] Folajimi Oyebola Heather Lemen, Lieve de Wachter, Dirk Speelman Jordi Heeren, Lieve de Wachter, Dirk Speelman Lieve de Wachter, Dirk Speelman 15:00 – 16:00 [Academy Building, Geerts=mazaal] COURTENAY NORBURY Does Social (Pragmatic) Communication Disorder Exist? Language Proficiency in University Achievement 15:00 – 16:00 [Harmony Building, Marie-Lokezaal and Expositieruimte] POSTER SESSION A Formany Buildi	13:30 - 14:00	[Academy Building, A7]	[Academy Building, Zernikezaal]	[Academy Building, A12]
Sune Gregersen, Wim Caers Wat mutt, dat mutt: 'Independent' Modals in West Germanic Sanne Poelstra, Simone Sprenger, Jacolien van Rij Hedwig Gerits The Relation Between Listening Comprehension and Grammar Acquisition: and Frequency on Idiom Listening Comprehension and Grammar Acquisition: A Study into the 14:30 – 15:00 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A1] Folajimi Oyebola Attitudes of Nigerians towards BBC Pidgin Heather Lemen, Elena Lieven Anna Theakston Function and Frequency: An Investigation into Children's Comprehension of Complex Causal and Conditional Sentences. Jordi Heeren, Lieve de Wachter, Dirk Speelman The Role of Academic Language Proficiency in Undergraduate Students' University Achievement 15:00 – 16:00 [Academy Building, Geerts=mazaal] COURTENAY NORBURY Does Social (Pragmatic) Communication Disorder Exist? Undergraduate Students' University Achievement 16:30 – 18:00 [Harmony Building, Marie-Lokezaal and Expositieruimte] POSTER SESSION A from 19:00 [Louis XV]		Globalisation in Linguistic Landscapes: Nordic Language Mimicry	Sible Andringa, Judith Rispens, Enoch Aboh Kindergarteners' Statistical Learning is Influenced by	Linda Badan The Acquisition of Italian Discourse Markers by Belgian-Dutch Speakers as a Function of
Wim Caers Wat mutt, dat mutt: 'Independent' Modals in West Germanic Vernaculars Simone Sprenger, Jacolien van Rij The Influence of Age and Frequency on Idiom Familiarity The Relation Between Listening Comprehension and Grammar Acquisition: A Study into the Effectiveness of Teaching the Hungarian Grammar Through Listening Tasks 14:30 – 15:00 [Academy Building, A7] [Academy Building, Zernikezaal] [Academy Building, A12] Folajimi Oyebola Attitudes of Nigerians towards BBC Pidgin Heather Lemen, Elena Lieven Anna Theakston Function and Frequency: An Investigation into Children's Comprehension of Complex Causal and Conditional Sentences. Jordi Heeren, Lieve de Wachter, Dirk Speelman The Role of Academic Language Proficiency in Undergraduate Students' University Achievement 15:00 – 16:00 [Academy Building, Geerts=mazaal] COURTENAY NORBURY Does Social (Pragmatic) Communication Disorder Exist? Undergraduate Students' University Achievement 16:00 – 16:30 BREAK (30 min) move to Harmony Building Jordi Exist? FoosTER SESSION A 16:30 – 18:00 [Harmony Building, Marie-Lokezaal and Expositieruimte] POSTER SESSION A Poster Session A	14:00 - 14:30	[Academy Building, A7]	[Academy Building, Zernikezaal]	[Academy Building, A12]
Folajimi Oyebola Heather Lemen, Jordi Heeren, Attitudes of Nigerians Elena Lieven Jordi Heeren, towards BBC Pidgin Anna Theakston Dirk Speelman Function and Frequency: An Investigation into Children's Language Proficiency in Investigation into Children's Comprehension of Complex Causal Undergraduate Students' I5:00 – 16:00 [Academy Building, Geertsemazaal] COURTENAY NORBURY Does Social (Pragmatic) Communication Disorder Exist? Investigation into Pisorder Exist? 16:00 – 16:30 BREAK (30 min) move to Harmony Building, Marie-Lokezaal and Expositieruimte] POSTER SESSION A from 19:00 [Louis XV]		Wim Caers Wat mutt, dat mutt: 'Independent' Modals in West Germanic	Simone Sprenger, Jacolien van Rij The Influence of Age and Frequency on Idiom	The Relation Between Listening Comprehension and Grammar Acquisition: A Study into the Effectiveness of Teaching the Hungarian Grammar
Attitudes of Nigerians towards BBC Pidgin Elena Lieven Lieve de Wachter, Anna Theakston Dirk Speelman Function and Frequency: An Investigation into Children's The Role of Academic Language Proficiency in Undergraduate Students' University Achievement 15:00 – 16:00 [Academy Building, Geertsemazaal] COURTENAY NORBURY Does Social (Pragmatic) Communication Disorder Exist? 16:00 – 16:30 BREAK (30 min) move to Harmony Building 16:30 – 18:00 [Harmony Building, Marie-Lokezaal and Expositieruimte] POSTER SESSION A [Louis XV]	14:30 - 15:00	[Academy Building, A7]	[Academy Building, Zernikezaal]	[Academy Building, A12]
COURTENAY NORBURY Does Social (Pragmatic) Communication Disorder Exist? 16:00 – 16:30 BREAK (30 min) move to Harmony Building 16:30 – 18:00 [Harmony Building, Marie-Lokezaal and Expositieruimte] POSTER SESSION A from 19:00 [Louis XV]		Attitudes of Nigerians	Elena Lieven Anna Theakston Function and Frequency: An Investigation into Children's Comprehension of Complex Causal	Lieve de Wachter, Dirk Speelman The Role of Academic Language Proficiency in Undergraduate Students'
Does Social (Pragmatic) Communication Disorder Exist? 16:00 – 16:30 BREAK (30 min) move to Harmony Building 16:30 – 18:00 [Harmony Building, Marie-Lokezaal and Expositieruimte] POSTER SESSION A from 19:00 [Louis XV]	15:00 - 16:00	[Academy Building, Geerts	semazaal]	
16:30 – 18:00 [Harmony Building, Marie-Lokezaal and Expositieruimte] POSTER SESSION A from 19:00 [Louis XV]			nmunication Disorder Exist?	
POSTER SESSION A from 19:00 [Louis XV]	16:00 - 16:30			
from 19:00 [Louis XV]	16:30 - 18:00	[Harmony Building, Marie-	-Lokezaal and Expositieruimte]	
		POSTER SESSION A		
Conference dinner	from 19:00	[Louis XV]		



FRIDAY 21 JUNE

9:00 - 10:00	[Academy Building, Geertsemazaal] MARTIN PICKERING Understanding Dialogue: Language Use and Social Interaction				
10:00 – 10:30	[Academy Building, Zernikezaal]	[Academy Building, A7]		[Academy Building, A8]	
	Jack Hoeksema, Gertjan van Noord SPOD – Syntactic Profiler of Dutch: An Online Tool for Grammatical Research	Anika van der Klis, Rianne van Lieburg, Lisa Cheng, Claartje Levelt Pauses Matter: Rule-Learning in Children		Aviya Hacohen, Amit Kempler, Olga Nehmad On the Scalar Nature of Telicity: Evidence from Psycholinguistics	
10:30 - 11:00	[Academy Building, Zernikezaal]	[Academy Bui	lding, A7]	[Academy Building, A8]	
	Stefan Frank, John HoeksAnn-Katrin Ohlert, Roelien Bastiaanse,The Interaction Between Structure and Meaning in Sentence Comprehension:Chiara Negwer, Nico Sollmann, Severin Schramm, Axel Schröder, Sandro Krieg Cortical Involvement During Object and Action Naming in Healthy Participants Under nTMS		anse, r, mm, mm, ment During ion Naming in	Sofia Bimpikou Represented Thought and Perception in Fictional Narratives: An Experimental Study	
11:00 – 11:15	BREAK (15 min) Coffee, tea				
11:15 12:15	[Academy Building, Geertsemazaal]				
	LUCIA SPECIA Multimodal Natural Language Processing: When Text is Not Enough				
12:15 – 13:15	[Harmony Building, Weberfoyer]		[Harmony Building, 1312.0024]		
			EYE-TRACKING WORKSHOP (bring-your-lunch) Eye-Tracking for Language Research: An EyeLink Workshop Limited space of 30: email Sam Hutton at sam@sr-research.com to register!		
13:15 - 13:45	[Academy Building, Heymanszaal]	[Academy Bui Van der Leeuw	-	[Academy Building, A8]	
	Helen R. Hoogkamer, Marina Terkourafi The Perceived Offensiveness of English Swearwords by L1 Dutch, L2 Speakers of English	Ankelien Schip Esther Ruigen Margreet Voge Subject/Object and Interventio Case	dijk, elzang Asymmetries	Laura Delussu A Corpus Study of Negative Prefixes in- and un- in Learner, World, and Native Englishes	



13:45 – 14:15	[Academy Building, Heymanszaal]	[Academy Building, Van der Leeuwzaal]	[Academy Building, A8]	
	Marjon Tammenga- Helmantel, Sharon Steringa, Iryna Bazhutkina, Cor Suhre Teaching Complex Grammar in Dutch EFL Classrooms: A Study on the Effectiveness of Deductive, Inductive, Implicit and Incidental Instruction	Maaike van Naerssen Requests for Confirmation, Negotiating Epistemic Access in Dutch and Indonesian(?)	Ami Okabe A Corpus Survey on the Distinction Between 'Staan' and 'Liggen' in Locative Expressions about Buildings and Landforms	
14:15 – 14:45	[Academy Building, Heymanszaal]	[Academy Building, Van der Leeuwzaal]	[Academy Building, A8]	
	Mieke Slim, Peter Lauwers, Robert Hartsuiker Priming of Logical Representations in Monolingual and Bilingual Language Comprehension	Saar Hommes, Ruben Vromans, Felix Clouth, Xander Verbeek, Jeroen Vermunt, Steffen Pauws, Lonneke van de Poll- Franse, Ignace de Hingh, Emiel Krahmer Communicating Treatment Options in Linguistic Decision Aids for Colorectal Cancer Patients: A Systematic Review	Thomas de Roo, Maria Koptjevskaja-Tamm A Corpus-based Comparison of Temperature Adjectives across Germanic Languages	
14:45 - 15:45	[Academy Building, Geertser	nazaal]		
	NEIL COHN Reimagining the Language Faculty: A Multimodal Model of Language			
15:45 – 16:00	BREAK (15 min) move to Harmony Building			
16:00 - 17:30	[Harmony Building, Marie-Lo	okezaal and Expositieruimte]		
	POSTER SESSION B			
17:30 - 18:30	[Harmony Building, Weberfo	yer]		
	CLOSING DRINKS			

Create your PERFECT THUS BILDED BILDED



Tips & tricks learn more <u>Click here</u>



Professional thesis design <u>Click here</u>



Workshop your thesis <u>Click here</u>

Over 35 years of experience in supreme quality printing. correct delivery of files = personal planning = paper types = page layout = cover artwork = production methods

Get a 10% DISCOUNT

CODE **TABU19**

DIRECT CONTACT

Tom van Zwieten 06 1938 2726 / tvanzwieten@gildeprint.nl



Craftsmanship through knowledge!



16:30 - 18:00

Harmony Building, Marie-Lokezaal

A.01	Vicky Griva
	Crosslinguistic Influence in Greek-English Bilinguals' Instant Messaging Practices
A.02	Melanie Hof, Ninke Stukker, Veerle Baaijen & Kees de Glopper
	Measuring Development of Writing Skills: A Style and Genre-based Approach
A.03	Vera Hukker, Simone Sprenger & Petra Hendriks
	The Role of Moral Norm Violations in Dutch Children's Understanding of Verbal Irony
A.04	Ruth Keßler, Elfi Ebner, Anne Rau & Claudia K. Friedrich
	Understanding Only Station: A Developmental Perspective on Novel Idiom Interpretation
A.05	Jelmer Moojen
	Am I a Joke to You? - How Dutch High School Students Perceive and Use Wordplay and Puns in English
A.06	Paola Mureddu & Esli Struys
	The Influence of L2 on L1: A Study on Homonyms and Cognates in English and Italian.
A.07	Roberta Pittaluga
	3D Cubes and Valency Grammar to Understand Pronouns in Italian: a Case Study
80.A	Caroline Postler
	Hyphenation as Reading Aid in German Compounds - an Eye-tracking Study
A.09	Xinyu Zhang & Rob van Son
	Vocal Effort as an Explanation of Vowel Space Shift after Treatment of Oral Cancer
Harm	nony Building, Expositieruimte
A.10	Ali Algryani
A.10	The Syntax of Sluicing in Omani Arabic
A.11	Raoul Buurke
,	Estimating the Language Use and Status of Intensifiers "Quite", "Bloody", and "Fucking" in British English
A.12	Suzanne Dekker
	Not With That Attitude: Translanguaging in Frisian Primary Schools
A.13	Lisanne de Jong, Margherita Burdese, Joana Duarte & Marlous Visser
	VirtuLApp: Using Digital Tools to Develop Multilingual Education in Primary Schools
A.14	Remco Knooihuizen, Lysbeth Jongbloed-Faber & Martine Jansen
	Gay Frysk: Expressing LGBT identity in a Minority Language
A.15	Pol van Rijn & Margreet Vogelzang
	Noun Capitalization: Can Dutch Readers Benefit from it?
A.16	Marie Schnieders & Ankelien Schippers
	Two Grammars, One Speaker: the Case of Low German Verbal Clusters
A.17	Two Grammars, One Speaker: the Case of Low German Verbal Clusters Pouran Seifi, Marjolijn Verspoor, Hanneke Loerts & Pim Mak
A.17	
A.17 A.18	Pouran Seifi, Marjolijn Verspoor, Hanneke Loerts & Pim Mak

16:00 - 17:30

Harmony Building, Marie-Lokezaal

B.01	Lianne Bansema
	Sub-conscious Learning: The Usefulness of Subtitling and Captioning for L2 Vocabulary Acquisition
B.02	Floor van den Berg, Eleonora Rossi, Merel Keijzer & Judith Kroll
	Boosting Cognition in Older Adults by Means of Short Intensive Foreign Language Learning
B.03	Zuzana Černá & Radek Čech
	Motherhood in Czech Mass Media — Corpus Assisted Discourse Studies Approach
B.04	Alice Fiorentino
B 05	Receptive Multilingualism as a Stage of Second Language Acquisition in the Language Development of Adopted Children Szilvia Hunyadi
5.00	The Effect of the Prima Vista Reading Method on the Written English Pragmatic Competence of Dutch Upper Secondary Students
B 06	Remco Knooihuizen & Max Reuvers
B.00	A Bilingual View on Transmasculine Voice Change
B 07	Marjolein Mues, Jennifer Zuk, Elizabeth Norton, Ola Ozernov-Palchik, Tiffany P. Hogan, John D.E. Gabrieli & Nadine Gaab
0.07	On Speaking Terms: A Longitudinal Study Examining the Relationship Between Early Speech-Sound Production and Later Literacy Outcomes
B.08	Miguel Santin, Angeliek van Hout & Monique Flecken
	Change-of-state Events and the Semantics of Verbs Across Languages
B.09	Tess van der Zanden, Maria Mos, Alexander Schouten & Emiel Krahmer
	Impression Formation on Online Dating Sites: Effects of Language Errors in Profile Texts on Perceptions of Profile Owners'
	Attractiveness
Llarr	nony Building Expectitionum to
	nony Building, Expositieruimte
B.10	Vincent Boswijk, Hanneke Loerts, Matt Coler & Nanna Hilton
	Frequency Effects in Bilinguals' Word Processing
B.11	Jelle Brouwer & Nicolas Dirix
-	Does 'Affect' Really Affect the Second Language?: A Corpus Eye-tracking Study of Emotion Processing in the Second Language
B.12	Katrina Dobson, Jidde Jacobi, Teja Rebernik, Martijn Wieling, Mark Tiede,
	Philippe Paquier, Anna Jansen & Stefanie Keulen
D 42	Feedback Deficits in Childhood Apraxia of Speech: An Investigation with Electromagnetic Articulography
B.13	John Hoeks, Emma Zaal & Marieke Siemerink Matiustica Change Designing a Computer Based Dislague Suptom to Japaning a Diant Based Lifestula
B.14	Motivating Change: Designing a Computer-Based Dialogue System to Inspire a Plant-Based Lifestyle
D.14	Jidde Jacobi, Teja Rebernik, Roel Jonkers, Ben Maassen, Michael Proctor & Martijn Wieling
B.15	Timing and Coordination of Speech in Parkinson's Disease Teja Rebernik, Jidde Jacobi, Roel Jonkers, Michael Proctor & Martijn Wieling
D.15	The Effect of Levodopa and Fatigue on Dysarthric Speech of Slovene Patients with Parkinson's Disease
B.16	Natalia Rivera-Vera, Padraic Monaghan, Sible Andringa & Edmundo Kronmüller
D.10	The Effect of Input Reliability in Adult Second Language Cross-situational Word Learning
B.17	
0.17	Jorrig Vogels Both Thematic Role and Next-mention Biases Affect Pronoun Use in Dutch
B.18	David Öwerdieck, Ankelien Schippers & Margreet Vogelzang
5.10	'Good Enough' Processing in Locally Case-Ambiguous German Long-Distance Wh-Questions: Evidence from Self-Paced
	Reading





KIRSTEN ABBOT-SMITH Senior Lecturer in Psychology at the University of Kent

Kirsten Abbot-Smith obtained an Honours degree in Linguistics from La Trobe University in Australia and then a PhD in Psychology at the University of Manchester. She held a postdoctoral position at the Max Planck Institute for Evolutionary Anthropology, with Michael Tomasello and Elena Lieven. Following three years as a Lecturer in Psychology at the University of Plymouth, she moved to Psychology at the University of Kent, where she established the Kent Child Development Unit. She is primarily interested in individual differences in pragmatic language development in typically-developing children and autistic children and in the cognitive skills which underpin the ability to successfully use language to establish and maintain peer relationships. She also has research interests in the development of instruments which can allow education professionals to identify children with speech, language and communication difficulties. Her recent publications can be downloaded here: https://www.kent.ac.uk/psychology/people/abbot-smithk.

Talk: Learning to Perspective-Take in Conversation

The ability to converse socially with others is the glue of human social interaction. To converse proficiently we need to be able to take in account 'common ground'; that is, the information that we share (and know we share) with a given conversation partner. When following in on a conversation partner's turn, we use common ground both to talk about topics we know the listener is interested in and also to avoid repeating something we have said previously to that listener. When inferring whether an utterance such as '*Well done!*' is intended literally or ironically, we must rely on the knowledge we and the speaker share. Finally, when interpreting verbal reference (e.g. '*Can you hand me that pen?*'), we may need to compute common ground to successfully determine which pen the speaker intends.

In the current talk, I will discuss several recent studies with typicallydeveloping and autistic children. I will address the extent to which the same cognitive skills underpin the ability to successfully use common ground during various types of pragmatic language task (conversation, verbal reference, and irony interpretation). In particular, I consider to degree to which working memory and cognitive flexibility play an important role in specific aspects of pragmatic language development.

KEYNOTE SPEAKERS



NEIL COHN Assistant Professor of Communication and Cognition at Tilburg University

Neil Cohn is an assistant professor in the Department of Communication and Cognition at Tilburg University. He is internationally recognized for his research on the overlap of the structure and cognition of sequential images and language. Having originally started working in the American comic industry as a teenager, he is the author and/or illustrator of several graphic novels. His book, *The Visual Language of Comics* (Bloomsbury, 2013), introduces a broad framework for studying visual narratives in the linguistic and cognitive sciences. His edited volume, *The Visual Narrative Reader* (Bloomsbury, 2016), integrates interdisciplinary research on visual narratives into a unified field within the cognitive sciences. His work is online at <u>www.visuallanguagelab.com</u>.

Talk: Reimagining the Language Faculty: A Multimodal Model of Language

Natural human communication is multimodal. We pair speech with gestures, use emoji with our texting, and combine writing with drawings and images in places from doodles to comics to advertising. This communication is structurally complex, especially in contexts like visual narratives where grammatical structures organize both the sequential text (syntax) and the sequential images (narrative). Such complexity poses a challenge both to linguistic models that focus on single modalities, and to theories of multimodality where only a single form uses combinatorial structure (like in co-speech gesture). This presentation will outline a reimagining of the language faculty for addressing this complexity embedded within Jackendoff's (2002) model of a Parallel Architecture of language. I will break down the primary modalities of spoken, bodily, and graphic communication into their constituent parts, and then show that the resulting interactions have systematic characterizations and profiles. Altogether, different types of human expression – speech, gesture, drawings, and their multimodal interactions – arise as emergent activation states out of this broader cognitive architecture. Such an approach can both guide research into multimodal communication and warrant a reconsideration of what constitutes the language system.





JAN HULSTIJN Professor Emeritus of Second Language Acquisition at the University of Amsterdam

Jan Hulstijn is professor emeritus of second language acquisition at the Amsterdam Center for Language and Communication (ACLC) of the University of Amsterdam. He has been affiliated with this university (full professor) since 1998. Before that he held positions at Leiden University and the Free University of Amsterdam. He was associate post-doc researcher at the University of Toronto, Canada (1982-1983) and he was visiting professor at the University of Leuven, Belgium, (2002) and at Stockholm University (2005). His main research interests are concerned with (1) language proficiency in native and non-native speakers; (2) explicit versus implicit accounts of first and second language learning and (3) theories of second language acquisition and philosophy of science. With others PIs, he received a number of research grants from the Netherlands Organisation of Scientific Research (NWO) between 1982 and 2007 (see webpage). In 2018 he received the 2018 distinguished scholar award from the European Second Language Association (EuroSLA). In 2015, he published a book presenting his theory of basic language cognition (BLC). His publication list can be downloaded from his webpage: <u>http://www.uva.nl/profile/j.h.hulstijn</u>.

Talk: Proximate and Ultimate Explanations of Individual Differences in Language Use and Language Acquisition

In the first part of this presentation, I present a very brief historical overview of three schools in linguistics (structuralism; generative linguistics; usage based linguistics) and psychology (behaviorism, firstwave cognitive psychology, second-wave neural-network psychology), viewed from various epistemological stances (induction, deduction, abduction). The shifts from one school (paradigm) to another was not primarily produced by a study which falsified a crucial empirical claim, typical of a given school. Rather, researchers were attracted by a new school because of criteria such as implausibility of assumptions of an earlier school. Currently, there is an increasing awareness in linguistics that theories (providing so-called proximate explanations) must match meta-theories (providing ultimate explanations), in particular Darwinian thinking and Complex Adaptive Systems.

In the second part of the presentation, I will address some questions concerning the explanation of individual differences in language use, language acquisition, and general cognitive functions (e.g., working memory and executive functions). In the light of Darwinian thinking and Complex Adaptive Systems, unequal frequency distributions of linguistic elements in language production constitute a necessary and defining characteristic of language use and language acquisition, which impact on individual differences. I argue that these differences emerge differently in the spoken vernacular and in the written standard language. Explaining individual differences also implies explaining commonalities (cognition shared by people) (Hulstijn, 2015). From a usage-based perspective, this means that the empirical domain of a theory of language acquisition and language use consists of observations of language production and language understanding/comprehension, more so than of observed grammaticality judgments. I will then address the crucial question to what extent, and with which methodological tools, we can establish the content and boundaries of shared linguistic cognition, in a population of language users as well as in individual language users, given the assumption (of usage-based linguistics and neural-network psychology) that cognition is fundamentally probabilistic. I will present analyses of a corpus of spoken language, produced by 98 adult native speakers of Dutch, differing in age (18-76) and level of education and profession (High, Low), illustrating the daunting challenges of studying commonalities and differences in language cognition with the aim of addressing proximate explanations, matching ultimate explanations.

REFERENCES

- Ellis, N. C. (2019). Essentials of a theory of language cognition. *The Modern Language Journal*, *103* (Supplement 2019), 39-60. <u>https://doi.org/10.1111/modl.12532</u>
- Hulstijn, J. H. (2015). Language proficiency in native and non-native speakers: Theory and research. Amsterdam: John Benjamins Publishing Company.
- Hulstijn, J.H. (2019). An individual-differences framework for comparing nonnative with native speakers: Perspectives from BLC Theory. *Language Learning*, 69:S1, 157-183. <u>https://doi.org/10.1111/lang.12317</u>
- Kidd, E., Donnelly, S., & Christiansen, M. H. (2018). Individual differences in language acquisition and processing. *Trends in Cognitive Sciences*, 22, 154–169. <u>https://doi. org/10.1016/j.tics.2017.11.006</u>
- Lestrade, S. (2017). Unzipping Zipf's law. *PloS one*, *1*2(8), eO181987. <u>https://doi.org/10.1371/journal.pone.O181987</u>
- Muthukrashna, M., & Henrich, J. (2019). A problem in theory. *Nature Human Behaviour*. https://doi.org/10.1038/s41562-018-0522-1
- Van den Bergh, J.C.J.M. (2018). *Human evolution beyond biology and culture*. Cambridge University press.





COURTENAY NORBURY

Professor of Developmental Disorders of Language and Communication at Psychology and Language Sciences, University College London

Courtenay Norbury is Professor of Developmental Disorders of Language and Communication at Psychology and Language Sciences, University College London. She is the Director of the Literacy, Language and Communication (LiLaC) Lab and a Fellow of the Royal College of Speech and Language Therapists. She obtained her PhD in Experimental Psychology at the University of Oxford, working with Professor Dorothy Bishop on the overlapping language profiles that characterise autism spectrum disorder and 'specific' language impairment. Professor Norbury's current research focuses on language disorders and how language interacts with other aspects of development. She is leading SCALES, a population study of language development and disorder from school entry. She is also a founding member of the <u>RADLD campaign</u>).

Talk: Does Social (Pragmatic) Communication Disorder Exist?

There is little doubt that some children have deficits in the social use of language that hinder communication and well-being. There is much less consensus about how such deficits should be conceptualised. DSM-5 (APA, 2013) introduced a new diagnosis, Social (Pragmatic) Communication Disorder (SPCD), characterized by persistent difficulties using verbal and nonverbal communication for social purposes in the absence of restricted and repetitive interests and behaviours and structural language impairments. The application of these criteria are hindered by a lack of robust assessment measures.

In this talk, I will summarise the history of SPCD and the challenges that remain concerning assessment and diagnosis. I will describe attempts to document the prevalence of SPCD using both clinical and population samples. These efforts reveal a tight coupling between pragmatic and structural language skills, and an association between SPCD and broader behavioural issues.

I will conclude that implementing the new diagnosis is currently challenged by a lack of well-validated and reliable assessment measures, and observed continuities between SPCD and other neurodevelopmental disorders. SPCD is probably best conceptualized as a dimensional symptom profile that may be present across a range of neurodevelopmental conditions. There remains a dearth of reliable and culturally valid assessment measures with which to make a differential diagnosis, and few rigorously tested intervention programmes. Successful treatment will likely incorporate both language and pragmatic targets in naturalistic communication settings.

KEYNOTE SPEAKERS



MARTIN PICKERING

Professor of the Psychology of Language and Communication at the University of Edinburgh

Martin Pickering is Professor of the Psychology of Language and Communication at the University of Edinburgh. His research focuses on the representation and processing of language and, in particular, on the mechanisms underlying dialogue as a form of joint action. He has published more than 150 journal articles on such topics as language comprehension during reading, self-monitoring during speech, language switching in bilinguals, and turn-taking in language and music. He served as editor of the Journal of Memory and Language, was recipient of the Experimental Psychology Society mid-career award, and is a Fellow of the Royal Society of Edinburgh.

Talk: Understanding Dialogue: Language Use and Social Interaction

We present a theory of dialogue as a form of cooperative joint activity. Dialogue is treated as a system involving two interlocutors and a shared workspace that contains their contributions and relevant non-linguistic context. The interlocutors construct shared plans and use them to "post" contributions to the workspace, to comprehend joint contributions, and to distribute control of the dialogue between them. A fundamental part of this process is to simulate their partner's contributions and to use it to predict the upcoming state of the shared workspace. As a consequence, they align their linguistic representations and their representations of the situation and of the "games" underlying successful communication. The shared workspace is a highly limited resource, and the interlocutors use their aligned representations to say just enough and to speak in good time. We end by applying the account beyond the "minimal dyad" to augmented dialogue, multi-party dialogue, and monologue.





LUCIA SPECIA

Professor of Natural Language Processing at Imperial College London (since 2018), and Professor of Language Engineering at the University of Sheffield (since 2012)

Lucia Specia is Professor of Natural Language Processing at Imperial College London (since 2018) and Professor of Language Engineering at the University of Sheffield (since 2012). Her research focuses on various aspects of data-driven approaches to language processing, with a particular interest in multimodal and multilingual context models and work at the intersection of language and vision. Her work has been applied to various tasks such as machine translation, image captioning, quality estimation and text adaptation. She is the recipient of the MultiMT ERC Starting Grant on Multimodal Machine Translation (2016-2021) and is currently involved in other funded research projects on machine translation (H2O2O Bergamot, APE-QUEST), multilingual video captioning (British Council MMVC) and text adaptation (H2O2O SIMPATICO). She was previously involved in 10+ funded research projects and has completed the supervision of 11 PhD students. In the past she worked as Senior Lecturer at the University of Wolverhampton, UK (2010-2011), and research engineer at the Xerox Research Centre, France (2008-2009, now Naver Labs). She received a PhD in Computer Science from the University of São Paulo, Brazil, in 2008. She has published 150+ research papers in peer-reviewed journals and conference proceedings.

Talk: Multimodal Natural Language Processing: When Text is Not Enough

In this talk I will provide an overview of work on multimodal machine learning where images are used to build richer context models for natural language tasks. Most of the talk will be focused on approaches to machine translation that exploit both textual and visual information to deal with complex linguistic ambiguities as well as common linguistic biases. I will cover state ot the art approaches and their limitations and describe two studies on when and how images can be beneficial to the task.

MAXMAX PLANCK INSTITUTEPLAFOR PSYCHOLINGUISTICS

P L A N C K

THE INTERNATIONAL MAX PLANCK RESEARCH SCHOOL (IMPRS) FOR LANGUAGE SCIENCES



The IMPRS for Language Sciences brings together outstanding doctoral students from diverse disciplines in the language sciences on the Nijmegen campus. We offer them high quality training in an environment that broadens their interdisciplinary experience while supporting the timely completion of their dissertations.

What our students say

The MPI is a very modern and well-equipped institute with lots of opportunities to perform your experiments, and it's also a great place to do fundamental research. This goes for molecular biology research as well as cognitive and psychological research into language. For anyone interested in speech and language (disorders), the Max Planck Institute for Psycholinguistics is the place to be!



Visit www.mpi.nl/imprs

to learn more about the IMPRS for Language Sciences



REPRESENTED THOUGHT AND PERCEPTION IN FICTIONAL NARRATIVES: AN EXPERIMENTAL STUDY



Sofia Bimpikou⁺ ¹University of Groningen

Keywords: Represented thought, represented perception, narrative, free indirect discourse, viewpoint shifting.

Recent work in semantics has focused on two phenomena related to perspective shifting in narratives, namely Free Indirect Discourse and Viewpoint Shifting. Free Indirect Discourse is defined as a vivid style of reporting a fictional character's thoughts/inner speech (Banfield, 1982), while Viewpoint Shifting is associated to the representation of a character's perceptual or mental state (Hinterwimmer, 2017; Abrusán, 2018). There is now emerging a debate as to whether the two phenomena are distinct constructions (Hinterwimmer, 2017; Maier, 2018) or whether they should be analysed with a unified semantic analysis (Abrusán 2018). I focus on the following questions: are Free Indirect Discourse and Viewpoint Shifting different with respect to how the statements they introduce are anchored? That is, do readers take such reports to reflect a character's or the narrator's perspective? Additionally, how does first-person or third-person narration affect readers' choice? A series of experiments addressing the above questions will be presented. Our findings suggest that the two phenomena do not differ to the extent to which they trigger shifting to a character's perspective, however, type of narration plays a role in how likely readers are to take a certain viewpoint.

References

Abrusán, M. (2018). Protagonist Projection. Paper presented at *Semantics and Linguistic Theory 28*, Cambridge, MA, USA.

Banfield, A. (1982). Unspeakable Sentences: Narration and Representation in the Language of Fiction. Routledge. Hinterwimmer, S. (2017). Two kinds of perspective taking in narrative texts. In Semantics and Linguistic Theory (Vol. 27, pp. 282-301).

Maier, E. (2018). On the exceptionality of reported speech. Ms. Short commentary for Linguistic Typology.

THE ACQUISITION OF ITALIAN DISCOURSE MARKERS BY BELGIAN-DUTCH SPEAKERS AS A FUNCTION OF STUDYING ABROAD

Elisa De Cristofaro', Linda Badan' ' Ghent University

Keywords: discourse markers, Italian L2, study abroad, L2 proficiency.

The mastery of discourse markers (DMs) is a necessary prerequisite for communicative proficiency in L2. DMs play a crucial role in the overall organization of discourse, in coordinating the communicative exchange between speakers, and in providing textual cohesion and coherence (e.g. Schiffrin 1987, Fraser 1999, Bazzanella 1995 for Italian).

Based on previous studies in other L2's (Freed 1995, 1998, Serrano et alii. 2011, Martinsen 2008), we tested whether the exposure to an Italian language environment improves proficiency in L2 learners' use of DMs. We recorded dialogical exchanges (elicited with the Map Task technique, Anderson et al. 1991) between 8 Belgian-Dutch learners of Italian L2, before and after attending a 6-month Erasmus exchange in an Italian university.

The results of our experiment reveal that the DMs used by the students both pre and post Erasmus are primarily *sì*, *ok*, *allora*, *quindi*, *dunque*, *be*'. However, whereas before the Erasmus DMs are used almost exclusively with an interactional function, after the Erasmus their spectrum of functions is broaden to cognitive and the meta-discursive uses. Interestingly, after the Erasmus some non-standard uses are observed for some of the DMs. These are best understood as an effect of attrition with the learners' language background.

References

- Anderson, A. H., Bader, M., Bard, E. G., Boyle, E., Doherty, G., Garrod, S., Weinert, R. (1991). The Hcrc Map Task Corpus. Language and Speech, 34(4), 351–366.
- Bazzanella, C. (1995). I segnali discorsivi. In L. Renzi, G. Salvi & A. Cardinaletti (Eds.): Grande grammatica italiana di consultazione. Bologna: Il Mulino, pp. 225–257.
- Fraser, B. (1999). What are discourse markers?. Journal of Pragmatics, 31, 931-952
- Freed, B. (1995). What makes us think that students who study abroad become more fluent? In B. Freed (Ed), Second Language Acquisition in a Study Abroad Context (pp. 123-148). Amsterdam: John Benjamins.
- Freed, B. (1998). An overview of issues and research in language learning in a study abroad setting. *The Interdisciplinary Journal of Study Abroad*, *4*, 31-60.
- Martinsen, R. A. (2008). Short-term study abroad: Predicting changes in oral skills. *Foreign Language Annals,* 43(3), 504-530
- Schiffrin D. (1987). Discourse markers. Cambridge: Cambridge University Press.
- Serrano, R., Llanes, A. & Tragant, E. (2011). Analyzing the effect of context of second school language learning: Domestic intensive and semi-intensive courses vs. study abroad in Europe. System, 39, 133-143

A CORPUS STUDY OF NEGATIVE PREFIXES *IN*- AND *UN*- IN LEARNER, WORLD, AND NATIVE ENGLISHES

Laura Delussu

Keywords: EFL, Learner English, World Englishes, negative prefixes, Dutch English, corpus linguistics.

A relatively recent strand of research has appeared in linguistics which tries to bridge the gap between Learner Englishes (LEs) on the one hand and World or New Englishes (WEs) on the other (Edwards, 2014; Edwards & Laporte, 2015). In order to bridge the divide which exists between LEs and WEs, a number of studies have zoomed in on lexical features of these two varieties, looking, among others, at the use of prepositions (e.g. *in vs. into*), phraseology (use of phrasal verbs, discourse markers), and derivational morphology (Callies, 2016; Granger & Gilquin, 2011; Gilquin, 2015). This study aims to further build on the results yielded within WEs research. Focussing on lexis, use of negative prefixes *in- (e.g. invariable*) and *un-* (e.g. *unemployment*) are examined in three corpora representative of the Learner, World and Native English varieties: the International Corpus of Learner English (ICLE) (Granger et al., 2009), the Corpus of Dutch English (Edwards, 2011), and the International Corpus of English (ICE, 2009).

The study aims to answer the following research questions: (1) How frequently are the negative prefixes *in*- and *un*- used in Learner, World, and native Englishes?, (2) What are the standard and innovative uses of these two prefixes in each variety?, and (3) Is Dutch English, known as a "foreign language" learner population, more akin to the WE or LE varieties based on the use of the negative prefixes *in*- and *un*-? The corpus results lend further credit to the fact that the currently strict divide between Learner and World Englishes should indeed rather be considered as a continuum, with certain EFL populations being more "prototypically" learner-like than others who bear a striking resemblance to the World and Native English varieties, at least in their use of in- and un-negative prefixes.

References

- Callies, M. 2016. Towards a process-oriented approach to comparing EFL and ESL varieties: A corpus study of lexical innovations. *International Journal of Learner Corpus Research*, 2(2), 229–250.
- Edwards, A. (2011). Introducing the Corpus of Dutch English. English Today, 47(3), 10-14.
- Edwards, A. (2014). The progressive aspect in the Netherlands and the ESL/EFL continuum. *World Englishes,* 33, 173–194.
- Edwards, A., & Laporte, S. (2015). Outer and Expanding Circles: The competing roles of norm orientation and proficiency levels. *English World-Wide*, *36*(2), 115-169.
- Gilquin, G., & Granger, S. (2011). From EFL to ESL: Evidence from the International Corpus of Learner English.
 In J. Mukherjee & M. Hundt (Eds.), *Exploring Second-Language Varieties of English and Learner Englishes:* bridging a paradigm gap (pp. 55-78). Amsterdam: John Benjamins.
- Gilquin, G. (2015a). At the interface of contact linguistics and second language acquisition research: New Englishes and Learner Englishes compared. English *World-Wide*, *36*(1), 91-124.
- Granger, S., Dagneaux, E., Meunier, F., & Paquot, M. (2009). *The International Corpus of Learner English*. *Version 2. Handbook and CD-ROM*. Louvain-la-Neuve: Presses universitaires de Louvain.
- The ICE Project. (2009). The Design of ICE Corpora. Retrieved from http://ice-corpora.net/ice/design.htm



THE INTERACTION BETWEEN STRUCTURE AND MEANING IN SENTENCE COMPREHENSION: RECURRENT NEURAL NETWORKS AND READING TIMES

Stefan Frank' & John Hoeks² 'Radboud University, ²University of Groningen

Keywords: Garden-path sentences, self-paced reading, reading time, thematic fit, recurrent neural network, surprisal.

Recurrent neural network (RNN) models of sentence processing have recently displayed a remarkable ability to learn aspects of structure comprehension, as evidenced by their ability to account for reading times on sentences with local syntactic ambiguities (i.e., garden-path effects). Here, we investigate if these models can also simulate the effect of semantic appropriateness of the ambiguity's readings.

We had RNNs estimate the occurrence probabilities of the disambiguating verbs in the sentence stimuli from Hoeks et al. (2006), containing an NP/S-coordination ambiguity (as in "The wizard guards the king and the princess *protects* ...") and compared these probabilities to self-paced reading times (RTs) on the same items. Bayesian mixed-effects regression analyses revealed that the verbs' surprisal (i.e., inverse probability) values show identical patters to RTs: Surprisal is higher after ambiguous structures compared to their disambiguated counterparts, and this effect is weaker, but not absent, in cases of poor thematic fit between the verb and its potential object ("The teacher baked the cake and the baker *made* ..."). These results show that an RNN is able to simultaneously learn about structural and semantic relations between words and suggest that garden-path phenomena may be more closely related to word predictability than traditionally assumed.

References

Hoeks, J., Hendriks, P., Vonk, W., Brown, C., & Hagoort, P. (2006). Processing the noun phrase versus sentence coordination ambiguity: Thematic information does not completely eliminate processing difficulty. *The Quarterly Journal of Experimental Psychology*, 59, 1581–1599.

JUDGMENTS OF SPOKEN DISCOURSE AND IMPRESSION FORMATION OF ADULTS WITH AUTISM SPECTRUM DISORDER

TALKS

Philippine Geelhand', Gaétane Deliens', Mikhail Kissine' 'Université libre de Bruxelles

Keywords: Spoken discourse, autism, impression formation.

Studies of spoken discourse in Autism Spectrum Disorder (ASD) essentially rely on transcripts, and suggest less coherence relative to neuro-typicals (NT) (Baixauli et al., 2016). Individuals with ASD are also judged as socially more awkward than their typical peers (Bone et al., 2015; Grossman, 2015). However, up to date, no study has sought to directly relate the linguistic features identified in transcripts with impression formation of the speaker. Furthermore, studies have focused essentially on the impressions of NT individuals. The present study addresses these two gaps by relating discourse features identified in transcripts with and without ASD as well as their contribution to impression formation of the speaker.

Our results suggest that raters with and without ASD evaluated the discourse quality of ASD speakers more negatively than NT speakers. Furthermore, while TD raters judged it more difficult to be understood by and understand ASD speakers than NT speakers, no such difference was found for ASD raters. Our results suggest that while both NT and ASD raters judged ASD speakers' discourse less positively than NT speakers, this impression did not influence their perception of mutual understanding, which was the case for NT raters.

References

- Baixauli, I., Colomer, C., Rosello, B., & Miranda, A. (2016). Narratives of children with high-functioning autism spectrum disorder: A meta-analysis. *Res Dev Disabil, 59*, 234–254.
- Bone, D., Black, M. P., Ramakrishna, A., Grossman, R., & Narayanan, S. (2015). Acoustic-prosodic correlates of "awkward" prosody in story retellings from adolescents with autism. In: *Proceedings of the Annual Conference of the International Speech Communication Association, INTERSPEECH*, p. 1616–20.
- Grossman, R. B. (2015). Judgments of social awkwardness from brief exposure to children with and without high-functioning autism. *Autism*.

TALKS

THE RELATION BETWEEN LISTENING COMPREHENSION AND GRAMMAR ACQUISITION: A STUDY INTO THE EFFECTIVENESS OF TEACHING THE HUNGARIAN GRAMMAR THROUGH LISTENING TASKS

Hedwig Gerits¹ ¹KU Leuven

Keywords: second language acquisition, implicit & explicit learning, Hungarian language, listening comprehension

The aim of my PhD project is to investigate to which extent foreign language learners of Hungarian independently develop implicit knowledge of new grammar rules, and the proficiency to use them, through listening tasks. In a quasi-experimental study, the acquisition of specific rules of the Hungarian grammar through listening tasks is compared with the acquisition of the same rules through a more traditional explicit method.

The choice of the grammar rules is based on their functionality in the Hungarian language. Besides being functional, the rules are also hard to learn (Rulik, 2009), in view of the fact that Hungarian has a different structure from the students' mother tongue.

The participants are learners of Hungarian in adult education classes in Leuven (Belgium) and in Aalst (Belgium). One class was assigned to the implicit condition, the other to the explicit one. The intervention will be carried out for three grammar rules. In all three cases, a quasi-experimental pretest/posttest design was set up.

The data collection will be completed in June 2019. The first statistical analyses suggest that more traditional explicit methods lead to better results in the short term, but that the difference between the two conditions diminishes in the longer term.

References

Rulik, I. (2009). Hibaelemzés köztes nyelvi keretben. In Teaching Hungarian as L2, Vol. 1, p. 106.

WAT MUTT, DAT MUTT: 'INDEPENDENT' MODALS IN WEST GERMANIC VERNACULARS



Sune Gregersen' & Wim Caers² 'University of Amsterdam, ²University of Antwerp

Keywords: Dutch dialects, Low German, West Frisian, modal verbs, dialectology

As has been observed in earlier research, the Dutch modal verbs *kunnen, mogen*, and *moeten* can be used without an accompanying infinitive in a way which is not possible in, e.g., English and German (cf. Mortelmans et al. 2009; Nuyts 2013). In this 'independent' use, illustrated in (1), the subject refers not to a participant in an event, but to the event itself:

(1) Het berijden van deze weg kan slechts met een fourwheeldrive.
 'Driving on this road is only possible with a four-wheel drive'. (CHN, 2010, newspaper)

In this paper, we investigate the distribution of this pattern in a number of lesser-studied West Germanic varieties. Based on evidence from dialect dictionaries, grammars, and corpora, we argue that the 'independent' use in (1) is not unique to contemporary standard Dutch, but is also attested in traditional Dutch and Low German dialects, West Frisian, and the Dutch 'daughter language' Afrikaans. Moreover, we will point out a related pecularity shared by Low German and (earlier) Dutch, namely the epistemic adverb *maglichte* 'maybe' (lit. 'may easily'). With our contribution, we hope to illustrate the usefulness and potential for historical dialect research presented by digitization efforts such as DBNL, eWND, and the *Nederlandse Volksverhalenbank*.

References

Corpus Hedendaags Nederlands. Retrieved from: http://corpushedendaagsnederlands.inl.nl/ Digitale Bibliotheek van de Nederlandse Letteren. Retrieved from: http://dbnl.org/ Elektronische Woordenbank van de Nederlandse Dialecten. Retrieved from: http://meertens.knaw.nl/ewnd/ Mortelmans, T., Boye, K., & Auwera, J. van der. (2009). Modals in the Germanic languages. In B. Hansen & F. de Haan (Eds.), Modals in the languages of Europe, p. 11–69. Berlin: De Gruyter Nederlandse Volksverhalenbank. Retrieved from http://www.verhalenbank.nl/ Nuyts, J. (2013). De-auxiliarization without de-modalization in the Dutch core modals: A case of collective

degrammaticalization? *Language Sciences*, 36. 124–133.

TALKS

ON THE SCALAR NATURE OF TELICITY: EVIDENCE FROM PSYCHOLINGUISTICS

Aviya Hacohen', Amit Kempler', Olga Nehmad' 'Ben-Gurion University of the Negev

Keywords: telicity, semantics/pragmatics, scalar judgments, Likert Scale

Traditional semantic approaches to telicity identify the central role of the nominal properties of the direct-object (definiteness, NP-Type) in deriving quantization, and consequently, the telicity-value of the predicate (e.g., Krifka 1989). Scalar accounts accept these assumptions, while underscoring the role of pragmatics (e.g., Hay et al. 1999). Common to all previous work to date, is the view of telicity as a binary, all-or-none phenomenon.

We propose that viewing telicity in this way obscures important facts about its true nature, as evident by our experimental findings. Using a Likert-Scale, an experimental tool never before employed in the investigation of telicity, we tested 25 Hebrew-speaking adults on their telicity interpretations. Our data reveal that speakers rarely judge predicates categorically, as either unambiguously telic or atelic, contra to predictions of the literature.

Our experimental paradigm and our empirical findings provide a level of detail that could not have been achieved using the traditional binary judgment tasks, standardly used in both theoretical and psycholinguistic investigations of telicity to date. As such, the current study not only launches a novel methodological enterprise, but, most importantly, allows for a refinement of the theory, which will ultimately lead to a better understanding of the nature of telicity.

References

- Krifka, M. (1989). Nominal reference, temporal constitution, and quantification in event semantics. In R. Bartsch, J. van Bentham & P. van Emde Boas (eds.), *Semantics and Contextual Expressions*, pp. 75–115. Dordrecht: Foris.
- Hay, J., Kennedy, C. & Levin, B. (1999). Scalar structure underlies telicity in "Degree Achievements". In Proceedings of SALT IX, edited by Tanya Matthews and Devon Strolovitch, pp. 127–144. CLC Publications, Ithaca, NY.

THE ROLE OF ACADEMIC LANGUAGE PROFICIENCY IN UNDERGRADUATE STUDENTS' UNIVERSITY ACHIEVEMENT

TALKS

Jordi Heeren⁺, Lieve De Wachter⁺, Dirk Speelman⁺ ⁺Leuven Language Institute (KU Leuven)

Keywords: Academic Language Proficiency, First year students, achievement, language screening, predictive validity.

The relation of language proficiency among university undergraduates, including L1speakers, to academic achievement has been a subject of investigation. Especially in universities with a more open entrance policy, academic language proficiency (ALP) is considered a possible stumbling block for starting students. Several studies confirm that students with a lower ALP have a higher risk of not succeeding (De Wachter, Heeren, Marx & Huyghe, 2013; Elder, Bright & Bennet, 2007; Van Dyk, 2015).

Although there is consensus that a that a minimal level of language proficiency is necessary for success in academic studies, it is not clear how language proficiency and specifically ALP interacts with background factors such as students' home language, socioeconomic status and pre-university attainments.

Our presentation links the results of a Dutch ALP screening testing reading and vocabulary skills of more than 12,000 first year students to their credit completion rate (CCR). The results confirm prior research that ALP is a small but meaningful predictor of achievement in that it can detect an at-risk group. Adding demographic background variables into a multiple regression model does not have a large impact on the predictive value of the ALP screening but ALP does appear to reflect students' prior educational attainments.

References

- De Wachter, L., Heeren, J., Marx S. & Huyghe, S. (2013). Taal: een noodzakelijke, maar niet de enige voorwaarde tot studiesucces. De correlatie tussen de resultaten van een taalvaardigheidstoets en de slaagcijfers bij eerstejaarsstudenten aan de KU Leuven [Language proficiency: a necessary, but not the only, condition for study success. A correlation of the results of a language proficiency test and academic achievement of first-year students]. *Levende Talen Tijdschrift*, 14(4), 28-36.
- Elder, C. Bright, C. & Bennet, S. (2007). The role of language proficiency in academic success: perspectives from a New Zealand university. *Melbourne Papers in Language Testing*, 12(1), 24-58.
- Van Dyk, T. (2015). Tried and tested. Academic literacy tests as predictors of academic success. *Tijdschrift voor Taalbeheersing*, 37(2), 159-186.

PERCEPTUAL SENSITIVITY TO TONAL ALIGNMENT FOR L1 SPEAKERS OF SPANISH (AND SHILLUK)

Louis Hendrix^{1,2} ¹University of Edinburgh, ²University of Khartoum

Keywords: tonal alignment, tone, speech perception, phonetics

Tonal alignment is the timing of fO-contours in relation to speech segments. Little is known about listeners' perceptual sensitivity to tonal alignment, though House (1996, 2000) argues firstly that perception of tonal alignment is not particularly sensitive; secondly, listeners may be less sensitive to differences in tonal alignment during the earliest 30-50 milliseconds of the vowel. The present research looks at the perception of L1 Spanish speakers. Data from a discrimination experiment with resynthesized stimuli pairs suggest that listeners perform better for larger differences in tonal alignment, and perceptual sensitivity varies systematically for the location in the word.

Although tonal alignment was long thought not be the primary correlate for any linguistic contrast (*e.g.* Yip 2002), recent research shows some languages do contrast tonal phonemes through systematic variation in tonal alignment (*e.g.* Remijsen 2013, DiCanio *et al.* 2014). *Production* data from South Sudanese language Shilluk shows two falling contours contrasted through tonal alignment (Remijsen & Ayoker 2014), and more finely than House's (2000) understanding of *perception* deems possible. Perception data (collection in March 2019) from L1 Shilluk speakers may shed further light on perceptual sensitivity to tonal alignment vis-a-vis location in the vowel and the potential role of L1 phonology.

References

House, D. (1996). Differential perception of tonal contours through the syllable. *ICSLP* 96.

- House, D. (2000). *Tonal Perception in Speech*. Travaux de l'Institut de Linguistique de Lund 24. Lund: Lund University Press.
- DiCanio, C. T., Amith, J. D., & García, R. C. (2014). The phonetics of moraic alignment in Yoloxóchitl Mixtec. 4th International Symposium on Tonal Aspects of Languages (TAL-2014), Nijmegen, The Netherlands, 203–210.

Remijsen, B. (2013). Tonal alignment is contrastive in falling contours in Dinka. *Language*, *89*(2), 297–327.

Remijsen, B., & Ayoker, O. G. (2014). Evidence for contrastive alignment in falling contours. 4th International Symposium on Tonal Aspects of Languages (TAL-2014), Nijmegen, The Netherlands, 6–9.

SPOD – SYNTACTIC PROFILER OF DUTCH: AN ONLINE TOOL FOR GRAMMATICAL RESEARCH



Jack Hoeksema', Gertjan van Noord' 'University of Groningen

Keywords: parsing, Dutch, profiler

SPOD is a recent addition to the PaQu (Parse-and-Query) website, and was developed by a grant from CLARIAH. It allows one to upload a corpus for the purpose of having it parsed by the Alpino parser (van Noord 2006), and queried. SPOD makes it possible to perform a large number of syntactically relevant predefined queries at the same time, making the website more approachable for users with limited computational skills and/or interests, and producing a broad overview of syntactic properties which can be reused for other corpora. This syntactic profile can be used to compare corpora, and we will illustrate its capacities with a study of written essays by children in elementary schools and high school. We will focus on those syntactic features which show an increase of linguistic development after the initial stages of acquisition (age 0 - 7 roughly).

References

Gertjan van Noord. 2006. At Last Parsing Is Now Operational. In: Piet Mertens, Cedrick Fairon, Anne Dister, Patrick Watrin (editors): TALNO6. Verbum Ex Machina. Actes de la 13e conference sur le traitement automatique des langues naturelles, 20--42.

TALKS

COMMUNICATING TREATMENT OPTIONS IN LINGUISTIC DECISION AIDS FOR COLORECTAL CANCER PATIENTS: A SYSTEMATIC REVIEW

Saar Hommes^{1,2}, Ruben Vromans, Felix Clouth, Xander Verbeek, Jeroen Vermunt, Steffen Pauws, Lonneke van de Poll-Franse, Ignace de Hingh, Emiel Krahmer 'University of Tilburg, ²Netherlands Comprehensive Cancer Organisation (IKNL)

Keywords: Risk communication, health communication, shared decision making, decision aids, communicative aspects, patient education

Colorectal cancer (CRC) is the third most common cancer in the world (Engelhardt et al., 2017). Patients diagnosed with the disease face the difficult choice of selecting the treatment option best suited to them. Ideally, they make this decision together with their doctor. This process is called "shared decision making" (Ubbink, Hageman & Legemate, 2015), for which *decision aids* (DA's) can be used. These DA's are linguistic tools (booklets, websites, pamphlets) designed to make choosing treatment easier, and are used for a wide variety of diseases (Knops et al., 2013). The aim of this systematic review is to (1) create a corpus of existing decision aids for CRC and (2) to assess their quality based on the 'International Patient Decision Aid Standards' (IPDAS) and several communicative and linguistic aspects.

Systematic reviews have shown that the IPDAS-criteria are not always met and even when they are, the quality of DA's is variable (Stacey et al., 2017). One explanation for this might be that crucial communicative and linguistic aspects of DA's are overlooked when designing and testing such tools (Vromans et al., forthcoming). In the current systematic review (results in April), existing CRC-DA's are assessed on IPDAS and on these communicative and linguistic features (including information presentation, personalized information, interaction, information control, accessibility, suitability and source of information).

References

- Engelhardt, E.G., Révész, D., Tamminga, H.J., Punt, C.J.A., Koopman, M., Onweteaka-Philipsen, B.D., Steyerberg, E.W., Jansma, I.P., De Vet, H.C.W. & Coupé, V.M.H. (2017). Clinical Usefulness of Tools to Support Decision-making for Palliative Treatment of Metastatic Colorectal Cancer: A Systematic Review. *Clinical Colorectal Cancer*, 17(1), p. 1-12.
- Ubbink, D.T., Hageman, M.G. & Legemate, D.A. (2015). Shared Decision Making in Surgery. *Surgical Technology International*, *26*, p. 31-36.
- Knops, A.M., Legemate, D.A., Goossens, A., Bossuyt, P.M. & Ubbink, D.T. (2013). Decision aids for patients facing surgical treatment decision: a systematic review and meta-analysis. *Annals of surgery*, 257(5), p. 860-866.
- Stacey, D., Légaré, F., Lewis, K., Barry, M.J., Bennett, C.L., Eden, K.B., Holmes-Rovner, M., Llewellyn-Thomas, H., Lyddiatt, A., Thomson, R. & Trevena, L. (2017). Decision aids for people facing health treatment or screening decisions (Review). *Cochrane Database of Systematic Reviews*, 4, p. 1-346.
- Vromans, R.D., Van Eenbergen, M.C., Pauws, S.C., Gelijnse, G., Van der Poel, H.G., Van de Poll-Franse, L.V., Krahmer, E.J. (accepted). Communicative aspects of decision aids for localized prostate cancer treatment- A systematic review. Uronlic Oncology: Seminars and Original Investigations, p.1-51.

THE PERCEIVED OFFENSIVENESS OF ENGLISH SWEARWORDS BY L1 DUTCH, L2 LEARNERS OF ENGLISH.



Helen R. Hoogkamer', Marina Terkourafi' 'Leiden University

Keywords: Language acquisition, interlanguage pragmatics, ESL, swear words.

Learning to swear in the L2 (second language) is challenging for L2 learners (Dewaele, 2004a). Learning how to swear depends heavily on correctly using a swearword within the appropriate context, depending on pragmalinguistic factors, such as: speaker, audience, subject, tone-of-voice, and setting (Allan & Burridge, 2006; Jay & Janschewitz, 2008; Jay, 2009; Dewaele, 2016). Further, L2 learners frequently misunderstand the offensiveness of L2 swearwords (Jay & Janschewitz, 2008; Dewaele, 2004b), and may be unaware of their impact (Horan, 2013). Using L1 (first language) Dutch, L2 English participants (n = 63), this study aimed to shed light on L2 swearing behaviour by comparing the frequency of L2 swearword use and the perceived offensiveness of L2 swearwords in different contexts. Results show that L2 learners rate offensiveness lower than native speakers (based on scales of offensiveness by McEnery, 2006 and others), show a correlation between frequency and offensiveness (r = -0.208, p = 0.012), and a two-way ANOVA reveals an impact of speaker (authoritative, peer or minor) (p = <0.01), and word (p =<0.01) on offensiveness. Based on this, a future study will evaluate the influences and effects of contextual variables and L2 attitudes on the perceived offensiveness of English swearwords.

References

- Allen, K. & Burrdige, K. (2006) Forbidden Words: Taboo and the Censoring of language. Cambridge: Cambridge University press.
- Dewaele, J. (2004a) Blistering Barnacles! What Language do Multilinguals Swear In? *Esudios de Sociolinguistica*, *5*(1), 83 105.
- Dewaele, J. (2004b) The Emotional Force of Swearwords and Taboo Words in the Speech of Multilinguals. Journal of Multilingual and Multicultural Development, 25(2-3), 204-222;
- Dewaele, J. (2016) Thirty shades of offensiveness: L1 and Lx English users' understanding, perception, and self-reported use of negative emotion-laden words. *Journal of Pragmatics*, 94, 112-127.
- Horan, G. (2013) 'You taught me language; and my profit on't/ls, I know how to curse': cursing and swearing in foreign language learning. *Language and Intercultural Communication*, *13(3)*, 283 297.
- Jay, T. (2009) Do offensive words harm people? *Psychology, Public Policy, and Law, 15(2),* 81-101. Jay, T., & Janschewitz, K. (2008) The pragmatics of swearing. *Journal of Politeness research, 4,* 267 – 288. McEnery, T. (2006) *Swearing in English: Bad Language, Purity, and Power from 1586 to the Present.* London:

Routledge.

PAUSES MATTER: RULE-LEARNING IN CHILDREN

Anika van der Klis', Rianne van Lieburg', Lisa Cheng', Claartje Levelt' 'Leiden University

Keywords: Non-adjacent dependency, artificial grammar learning, children, rule-learning, subliminal pauses, child language acquisition.

Adults could not learn a non-adjacent-dependency rule on the basis of the presence of this dependency alone. In Peña et al. (2002), rule-learning only occurred when the familiarization stream contained subliminal pauses between items. In Frost and Monaghan (2016), adults showed rule-learning without pauses, but only when the test items contained novel syllables.

We tested 142 children (aged 7-11) with the stream used in Peña et al. (2002). Half of the children received the stream with subliminal pauses and the other half without. Then they were presented with pairs of "rule-words" (A_iXC_i) and "part-words" (XC_iA_j or C_kA_iX). They had to choose which item most likely belongs to the language. Half of them received test items which occurred in the stream, but never before in that position. The other half received items containing novel X-syllables.

Novel syllables did not trigger above chance performance (18.28) nor was this a significant predictor in the linear mixed model (p = 0.15). Performance was only above chance with subliminal pauses (19.20 with familiar items, 19.62 with novel items), replicating the results by Peña et al. (2002) with children. This reinstates the importance of subliminal pauses for rule-learning – at least for young learners.

References:

- Frost, R., & Monaghan, P. (2016). Simultaneous segmentation and generalisation of non-adjacent dependencies from continuous speech. *Cognition*, 147, 70-74.
- Peña, M., Bonatti, L., Nespor, M., & Mehler, J. (2002). Signal-driven computations in speech processing. Science (New York, N.Y.), 298(5593), 604-7.
FUNCTION AND FREQUENCY: AN INVESTIGATION INTO CHILDREN'S COMPREHENSION OF COMPLEX CAUSAL AND CONDITIONAL SENTENCES.

TALKS

Heather Lemen', Elena Lieven', Anna Theakston' 'University of Manchester

Keywords: language acquisition, pragmatics, complex sentences, comprehension, causal and conditional sentences, production patterns.

Causal- and conditional-sentences are subject to pragmatic variation (Sweetser, 1990): in Content sentences, the subordinate clause explains a true cause (*because*) or sufficient condition (*if*) for an event/situation; in Speech-Act sentences, it justifies a speech act (*because*) or defines the conditions under which a speech act is performed (*if*). Although this variation occurs even in young children's speech (Kyratzis et al, 1990), many studies have relied solely on Content sentences to conclude that these connectives are particularly difficult for children to comprehend (e.g. De Ruiter et al., 2018).

To explore the relationship between input/production patterns and children's understanding of these terms, we used a forced-choice paradigm to test 93 3-5 year-old children's comprehension of *because-* and *if*-sentences with both pragmatic meanings. A comparison group of adults performed at ceiling for accuracy, but were significantly slower with Speech-Act. While children did not show a main effect of pragmatic type for either accuracy or response time, age and gender interacted with connective for children's accuracy, where 5-year-old boys and girls performed similarly, but 3-year-old boys performed significantly worse than 3-year-old girls on *if*-sentences. The relationship between production, comprehension and cognitive demands (e.g. Zufferey, 2010) will be discussed with regard to these findings.

- De Ruiter, L. E., Theakston, A. L., Brandt, S., & Lieven, E. V. (2018). Iconicity affects children's comprehension of complex sentences: The role of semantics, clause order, input and individual differences. *Cognition*, *171*, 202-224.
- Kyratzis, A., Guo, J., & Ervin-Tripp, S. (1990, August). Pragmatic conventions influencing children's use of causal constructions in natural discourse. In D.J. Costa (Ed.) *Proceedings of the Sixteenth Annual Meeting of the Berkeley Linguistics Society* (pp. 205-214). Berkeley: Berkeley Linguistics Society.
- Sweetser, E. (1990). From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure (Cambridge Studies in Linguistics). Cambridge: Cambridge University Press.
- Zufferey, S., Mak, W. M., & Sanders, T. J. (2015). A cross-linguistic perspective on the acquisition of causal connectives and relations. *International Review of Pragmatics*, 7(1), 22-39.

REQUESTS FOR CONFIRMATION, NEGOTIATING EPISTEMIC ACCESS IN DUTCH AND INDONESIAN(?)

Maaike van Naerssen' 'Leiden University

Keywords: Polar questions, confirmation requests, epistemics, agency, Indonesian, Dutch.

Polar questions are used to obtain information, initiate repair, check understanding, and negotiate relationships. Structurally, they present a particularly restricted response format: the type-confirming answers are limited to 'yes' and 'no'; a format that is mostly adhered to by participants (Raymond 2003:945). Heritage and Raymond (2012:185) argue that nontype-confirming responses, such as repetitions, indicate the speaker claims independent epistemic access. Similarly, Enfield and Sidnell (2015:134) suggest repetition is used to (re) assert agency. In this talk, I discuss how tag questions ('Right? Yes.), confirmation questions ('Really? Yes.'), and minimal confirmation sequences ('Yes? Yes.') are used in Dutch and Indonesian informal interaction to negotiate epistemic access. Of central concern is the use of repetition and/or affirmation markers in response to such questions. Whereas the Dutch data show bias towards affirmation markers, the opposite is found in the Indonesian data. Indeed, the use of repetition in answers is remarkably uncommon in Dutch (cf. Englert 2010). I argue that the supposed link between (lack of) agency and repetition or affirmation does not provide a satisfactory explanation for the observed patterns. To fully understand what people are doing and why, we need to take into account language specific preferences for negotiating interpersonal relationships more generally.

References

Enfield, N.J. and J. Sidnell (2015). Language structure and social agency: confirming polar questions in conversation. *Linguistic Vanguard 1*, 131-143.

Englert, C. (2010). Questions and responses in Dutch conversation. *Journal of Pragmatics* 42, 2666-2684. Heritage, J. and G. Raymond (2012). Navigating epistemic landscapes: acquiescence, agency and resistance

in response to polar questions. In: N.J. Enfield, P. Brown, and J.P. de Ruiter (eds.), *Questions: Formal, Functional and Interactional Perspectives*, pp. 179-192. Cambridge: Cambridge University Press.

Raymond, G. (2003). Grammar and social organization: yes/no interrogatives and the structure of responding. American Sociological Review 68, 939-97.

CORTICAL INVOLVEMENT DURING OBJECT AND ACTION NAMING IN HEALTHY PARTICIPANTS UNDER NTMS



Ann-Katrin Ohlerth', Roelien Bastiaanse, Chiara Negwer, Nico Sollmann, Severin Schramm, Axel Schröder, Sandro Krieg 'Centre for Language and Cognition Groningen, University of Groningen

Keywords: Language mapping, protocols, nTMS, Object Naming, Action Naming, semantics.

Introduction

As widely known from aphasia research, language batteries should consist of tasks including both nouns and verbs to robustly test an individual's language skills (Rofes et al., 2015). However, this knowledge has not been implemented in language mapping with navigated Transcranial Magnetic Stimulation (nTMS). This non-invasive brain stimulation method is widely used in clinical assessment, but lacks standardized protocols of profound linguistic knowledge. We present a 2-task paradigm for nTMS mapping, tested in healthy participants as a first step towards clinical application. We aim to answer the question, whether the verb task is a necessary addition to the noun task under nTMS.

Method

20 healthy participants underwent language mapping with nTMS. 46 cortical areas were targeted while the participants performed the tasks Object Naming(ON) and Action Naming (AN). Error rates and types during the two tasks were calculated per cortical area and compared.

Results

A higher error rate was found during AN (p<0.01), due to more lexico-semantic errors and due to high error rates around the central sulcus in both hemispheres.

Discussion

Adding AN to the paradigm has shown to be necessary: the higher error rate seems to arise from lexico-semantic differences between nouns and verbs. Big individual differences between participants, displaying no reaction to either ON or AN, underlines this necessity even further.

References

Rofes, A., Capasso, R., & Miceli, G. (2015). Verb production tasks in the measurement of communicative abilities in aphasia. *Journal of clinical and experimental neuropsychology*, 37(5), 483-502.

TALKS

A CORPUS SURVEY ON THE DISTINCTION BETWEEN *STAAN* AND *LIGGEN* IN LOCATIVE EXPRESSIONS ABOUT BUILDINGS AND LANDFORMS

Ami Okabe' 'Leiden University Centre for Linguistics

Keywords: Dutch, posture verbs, corpus, locative

This presentation aims at revealing the behaviour of the posture verbs *staan* and *liggen* in Dutch. The study focuses on locative expressions involving these verbs, especially when the located entity is a building or a landform. The expression of the location of buildings and landforms has received special treatment in the literature compared to the location of relatively small objects (e.g. a book, a chair, an apple) since the verbs show a different usage pattern in the former compared to the latter (Lemmens 2002 among others). However, previous studies have not investigated this matter in a systematic and comprehensive way. Therefore, this research uses corpus data and a quantitative method including statistical measures to show the difference between *staan* and *liggen*.

A corpus survey of the Corpus Hedendaags Nederlands and the concordancer SketchEngine shows that there are some parameters which are relevant for the choice between the two verbs. For example, the preference for either *staan* or *liggen* correlates with the verticality of a building/landform or with the word order in the verb phrase. This research further attempts to provide a systematic overview of the parameters and how they interact with each other.

References

Lemmens, Maarten. 2002. 'The Semantic Network of Dutch Posture Verbs'. In: John Newman (ed.) *The Linguistics of Sitting, Standing and Lying*. (=Typological Studies in Language 51). Amsterdam and Philadelphia. John Benjamins, p. 103–139.

DIVERSITY OF HEAD NOUNS IN REFERENTIAL COMMUNICATION: SAME-TYPE VS. MIXED-TYPE SETS OF STIMULI



Rahel Oppliger¹ ¹University of Zurich

Keywords: Referential communication, noun phrases, head nouns, experimental methods.

In noun phrase (NP) referring expressions (REs) that serve to identify a single intended referent, the head noun takes on a vital role: it designates the type of entity the RE picks out. This paper examines data from an experimental study where participants are tasked with describing stimuli of the same general type: dyads of speakers are confronted with either a set of hats, shirts, or a mixture of the two.

The REs they construct must thus distinguish among group of similar "potential referents" (Brown, 1995: 135). An analysis of the NPs produced in these three conditions reveals that speakers use basic level and subordinate-level category terms (Kronmüller and Barr 2015), empty head NPs (Fox and Thompson 2007: 297) and metonymic extensions as head nouns. The mixed-type condition favours the use of basic-level terms (90.6%), while in the same-type condition, subordinate-level terms (37.3%), empty head NPs (11.8%) and metonymic extensions (3.4%) make up over half the NP heads. This is in line with Brennan and Clark's (1997) findings that speakers use less basic-level terms in conditions with a contrast set; this study shows that this trend also applies to conditions that differ in the size of the contrast set.

References

Brennan, Susan E., and Herbert H. Clark. (1996). "Conceptual pacts and lexical choice in conversation". Journal of Experimental Psychology: Learning, Memory, and Cognition, 22(6), 1482–1493.

Brown, Gillian. 1995. Speakers, Listeners and Communication: Explorations in Discourse Analysis. Cambridge: Cambridge University Press.

Fox, Barbara A., and Sandra A. Thompson. 2007. "Relative clauses in English conversation: Relativizers, frequency, and the notion of construction". *Studies in Language*, *31*(2), 293–326.

Kronmüller, Edmundo, and Dale J. Barr. 2015. "Referential precedents in spoken language comprehension: A review and meta-analysis". *Journal of Memory and Language*, *83*, 1–19.

TALKS

ATTITUDES OF NIGERIANS TOWARDS BBC PIDGIN

Folajimi Oyebola¹ ¹University of Münster

Keywords: Sociolinguistics, language attitude, pidgin, prestige language

Although Pidgin is not an officially recognized language in West African countries, it is widely used and its acceptance is fast rising. It has permeated all domains of language. Its profile in the media and the entertainment is remarkably rising. Recently, the BBC launched a Pidgin News Service targeting audience in West and Central Africa through its World Service branch in Lagos, Nigeria. As part of this effort, the BBC has decided to develop a guide to a standardized written form of pidgin in West Africa (Kasaree 2017). Now that West African Pidgin English is being promoted by the BBC World Service, the concern is whether the language is going to remain the same or will be influenced structurally (Oyebola & Abidoye 2018) and whether users of Pidgin English will lend importance to the emergence of BBC Pidgin in terms of prestige and social attraction.The focus of this study is to investigate the attitudes of Nigerians towards the emergence of BBC Pidgin as a language of instruction and as a possible option for an official language in Nigeria. The interview-questionnaire approach was employed to elicit the attitudes and perceptions of Nigerians towards BBC Pidgin. The data from the questionnaires was analyzed quantitatively with SPSS (IBM Corp. 2017). Respondents' attitudes to BBC Pidgin in the dimensions of prestige and social attraction were inferred from their responses concerning the language. Findings from the analysis show that the Nigerian respondents attach some significance to the emergence of BBC Pidgin.

References

IBM Corp. Released 2017. *IBM SPSS Statistics for Windows, Version 25.0*. Armonk, NY: IBM Corp. Kasaree, N. Working towards a standard Pidgin. *BBC Academy, BBC*. Oyebola, F. & Abidoye, I. (2018). Number Marking in BBC Pidgin. *EKSU Journal of English Linguistics* 2, 45-54

THE INFLUENCE OF AGE AND FREQUENCY ON IDIOM FAMILIARITY

TALKS

Sanne Poelstra^t, Simone Sprenger^t, Jacolien van Rij^t ^tUniversity of Groningen

Keywords: Idioms, language acquisition, frequency, figurative competence

Idioms are sentences with both a figurative and literal interpretation. This study investigates the effect of frequency on idiom acquisition. Several studies have found that for adults, idiom familiarity increases with the idiom's frequency (e.g., Sprenger, la Roi, & van Rij, under review), but it has not been tested whether this also holds for children. Acquisition research suggest that 2- and 3-year old children are sensitive to the frequency of multiword phrases that occur in child-directed speech (e.g., Bannard & Matthews, 2008). However, idiom acquisition may be constrained by the acquisition of figurative competence (estimated at about 8 years of age; Levorato & Cacciari, 1992). In a behavioural experiment with 7-, 9-, and 11-year old children, we investigate the influence of age and frequency on idiom familiarity. Participants were asked to rate 30 idioms (semi-randomly sampled out of 104 idioms with various frequencies). Preliminary results indicate a clear frequency effect for adult controls, but not for the 7- and 9-year olds. Surprisingly, the children's groups showed no difference in performance. In comparison with the younger children, we expect increased idiom familiarity for the 11-year olds (data still coming in), and that their familiarity rating is modulated by idiom frequency.

References

Bannard, C., & Matthews, D. (2008). Stored word sequences in language learning: The effect of familiarity on children's repetition of four-word combinations. *Psychological science*, *19*(3), 241-248.

Levorato, M. C., & Cacciari, C. (1992). Children's comprehension and production of idioms: the role of context and familiarity. *Journal of Child Language*, 19(2), 415-433.

Sprenger, S., la Roi, A., & van Rij, J. (under review): *The Development of Idiom Knowledge across the Life Span.* Manuscript submitted for publication. November 2018.

LANGUAGE IN THE AGING BRAIN: USING ERPS TO STUDY IDIOM PROCESSING ACROSS THE LIFE SPAN

Amélie la Roi', Simone Sprenger', Petra Hendriks' 'University of Groningen/Neuroimaging Center, University Medical Center Groningen

Keywords: cognitive aging, idioms, event-related potentials, inhibition, ambiguity, sentence processing

As the population of elderly adults continues to grow worldwide, understanding the cognitive consequences of aging is becoming increasingly important. Our study examines the effect of age-related cognitive decline on language abilities by investigating the processing of idioms, such as the Dutch *tegen de lamp lopen* ('to walk against the lamp'). To activate the idiom's figurative meaning 'to get caught', the reader or listener has to inhibit the literal meanings of the idiom constituents ('to walk' and 'lamp'). Since inhibition skills typically decline with age (Craik and Salthouse, 2011), increased age is hypothesized to reduce the suppression, thus increasing the activation, of the literal meanings of idiom constituents. To test this hypothesis, we record the event-related potentials (ERPs) of 60 right-handed native speakers of Dutch (aged 18-80) while they read sentences containing an idiom. We predict age to correlate with the degree of activation of the literal meaning of the idiom's final noun. By studying idiom processing across the life span we aim to increase our understanding of the relation between cognitive functions and the processing of ambiguous expressions. Data is being analysed at the moment, so we are confident to be able to present the results at TABU Dag 2019.

References

Craik, F. I., & Salthouse, T. A. (Eds.). (2011). The Handbook of Aging and Cognition. Psychology Press.

A CORPUS-BASED COMPARISON OF TEMPERATURE ADJECTIVES ACROSS GERMANIC LANGUAGES



Thomas de Roo', Maria Koptjevskaja-Tamm² 'University of Groningen, ²Stockholm University

Keywords: Temperature, cross-linguistic variability, semantics, metaphors, typology

Temperature is universal and easily perceived by humans, but its conceptualization depends on a complex interaction between physical experience and external reality. This makes the ways in which language deals with temperature an intriguing subject. This project focuses on the salient temperature adjectives, such as hot, warm, tepid, cool and cold, which are compared according to their origin, function and especially their combinability with nouns, based on attributive and predicative collocations in six comparable corpora in English, Dutch, German, Danish, Swedish and Norwegian. As such this project makes an effort to chart the distribution of both concrete uses in the tactile (hot stove), ambient (hot air) and personal (cold shiver) frames of temperature evaluation, as well as that of the extended, metaphorical (cold heart) uses of temperature adjectives. The languages both resemble each other and differ in these patterns, especially the semantics of the extended usages. While most temperature adjectives are cognates, they are not always used in the same way, English stands out with hot as the salient antonym of cold for example. The research is embedded in a bigger typological project which tries to answer the question how semantic systems, such as the temperature system, emerge and develop.

References

Koptjevskaja-Tamm, Maria (ed.) 2015. *The linguistics of temperature*. Amsterdam /Philadelphia: John Benjamins.

TALKS

SUBJECT/OBJECT ASYMMETRIES AND INTERVENTION: THE ROLE OF CASE

Ankelien Schippers', Esther Ruigendijk', Margreet Vogelzang' 'Carl von Ossietzky Universität Oldenburg

Keywords: Subject/object asymmetries, intervention, wh-movement, relative clauses, memory interference.

We report on a self-paced reading + comprehension task investigating subject/object asymmetries in German A'-dependencies (wh-questions and relative clauses). It is well-known that object A'-dependencies are more difficult to process than subject A'-dependencies, which has been attributed to intervention (Belletti & Rizzi, 2013). Specifically, in object A'-dependencies, the subject intervenes, and if the subject is in a relevant sense similar to the object, it negatively impacts processing of the A'-dependency. In our study, we wanted to know whether case features matter for intervention: formal approaches to intervention (Relativized Minimality, Rizzi 2004) predict it doesn't, whereas processing approaches (memory interference, Bever 1974; Gordon et al., 2001), do.

In the current experiment, we manipulated feature dissimilarity by comparing accusative objects to dative objects. The latter is considered a lexical (inherent) case in German, which makes the object 'dissimilar' to the subject, which has structural nominative case. Our results show that contrary to what memory interference accounts predict, dative case did not alleviate intervention effects: dative conditions were associated with more processing difficulty. Conversely, the results do not contradict predictions made by Relativized Minimality. We attribute the higher processing difficulty for dative conditions to the special mechanisms by which dative case is assigned.

- Belletti, A. & Rizzi, L. (2013). Intervention in grammar and processing. In Carlo Cecchetto & Ivaono Caponigro (eds.), From Grammar to Meaning: The Spontaneous Logicality of Language, 294-311. Cambridge: Cambridge University Press.
- Bever, T. (1974). The ascent of the specious, or there's a lot that we don't know about mirrors. In David Cohen (ed.), *Explaining linguistic phenomena*, 173-200. Washington, D.C.: Hemisphere.
- Gordon, P. C., Hendrick, R., and Johnson, M. (2001). Memory interference during language processing. Journal of Experimental Psychology: Learning, Memory, and Cognition, 27(6), 1411.
- Rizzi, L. (2004). Locality and left periphery. In Adriana Belletti (ed.), *Structures and beyond: The cartography of syntactic structures, Vol. 3.* Oxford-New York: Oxford University Press.

PRIMING OF LOGICAL REPRESENTATIONS IN MONOLINGUAL AND BILINGUAL LANGUAGE COMPREHENSION



Mieke Slim'^{,2}, Peter Lauwers', Rob Hartsuiker' 'Ghent University, ²Fonds Wetenschappelijk Onderzoek – Vlaanderen

Keywords: Logical representations, quantification, semantic scope, priming, psycholinguistics

Doubly quantified sentences, such as *All gardeners see a spade*, are scopally ambiguous. Previous studies have shown that the interpretation of such sentences can be primed in English monolingual language comprehension, which indicates that comprehenders construct logical representations of semantic scope configurations (Raffray & Pickering, 2010; Feiman & Snedeker, 2016).

In this study, we investigate whether such priming effects occur in Dutch and French monolingual and bilingual language comprehension, using sentence-picture matching tasks. The critical test sentences have *all* (Dutch: *alle*, French: *tous*) in the subject position and *a* in the object position (Dutch: *een*, French: *un*). Baseline experiments we conducted showed no differences between Dutch and French in the spontaneous interpretation of these sentences. We are currently testing whether the two possible interpretations of the test sentences can be primed in Dutch and French monolingual language comprehension. Preliminary data show a priming effect of roughly 9% in both the Dutch (58 participants) and the French experiments (60 participants).

These findings suggest that the architecture of mental logical representations is not language-specific. We will soon conduct experiments that elicit priming of logical representations in bilingual language comprehension. If such between-language priming effects occur, bilinguals seem to have shared logical representations.

- Feiman, R., & Snedeker, J. (2016). The logic in language: How all quantifiers are alike, but each quantifier is different. *Cognitive Psychology*, 87, 29–52.
- Raffray, C. N., & Pickering, M. J. (2010). How do people construct logical form during language comprehension? *Psychological science*, *21*(8), 1090–1097.

THE COMMUNICATIVE ROLE OF LEXICAL STRESS IN COLUMBIA SCHOOL PHONOLOGY

Daniël Pieter van Soeren', Robert de Jonge' 'Columbia School Linguistic Society, New York City

Keywords: Columbia School Linguistics, phonology, lexical stress, word recognition.

This research studies the distribution of phonemes within Spanish CVCVCV words and English and Dutch CVCVC words from a Columbia School perspective (Diver 1979; Tobin 1997), and focuses on lexical stress as a relevant factor in the distribution of apical and visible phonemes. We argue that the notion of word recognition is key in the explanation of the results; in the pronunciation of a word, every phoneme eliminates a number of word candidates, making the identification of the word progressively easier. At the beginning of the word, where the word is least predictable, there is a higher burden on distinctiveness, which results in a favouring of other kinds of phonemes than at the end of the word. Several studies on word recognition in Spanish, English and Dutch (e.g. Cutler 2005; Soto-Faraco, Sebastián-Gallés & Cutler 2001; Van Donselaar, Koster & Cutler 2005) suggest that in addition to segmental information, the position of stress eliminates word candidates as well (e.g. a word-initial stressed syllable /'ru:/ could result in rumour, but eliminates routine as a candidate). In Spanish, English and Dutch discourse, the majority of words begin with a stressed syllable. Consequently, an unstressed initial syllable eliminates more word candidates, which affects the distribution of the aforementioned phonemes.

- Cutler, A. (2005). Lexical Stress. In: D.B. Pisoni and R.E. Remez (Eds.): *The Handbook of Speech Perception*. Malden/Oxford/Carlton: Blackwell Publishing Ltd.
- Diver, W. (1979). Phonology as human behavior. In: Aaronson and Rieber (Eds): *Psycholinguistic research: implications and applications*. Hillsdale, N.Y.: Lawrence Erlbaum Associates Inc., pp. 161-182.
- Soto-Faraco, S., Sebastián-Gallés, N. and Cutler, A. (2001). Segmental and Suprasegmental Mismatch in Lexical Access. Journal of Memory and Language (45), pp. 412-432.
- Tobin, Y. (1997). Phonology as Human Behavior: Theoretical Implications and Clinical Applications. Durham: Duke University Press.
- Van Donselaar, W., Koster, M. and Cutler, A. (2005). Exploring the role of lexical stress in lexical recognition. *Quarterly Journal of Experimental Psychology* 58A(2), pp. 251-273.

KINDERGARTENERS' STATISTICAL LEARNING IS INFLUENCED BY INSTRUCTION



Sybren Spit', Sible Andringa', Judith Rispens', Enoch O. Aboh' 'University of Amsterdam

Keywords: Statistical learning, eye tracking; explicit-implicit interface; artificial language learning; language acquisition.

A fundamental insight in the field of adult second language acquisition is that there is an interface between implicit statistical learning and explicit knowledge, while language learning by young learners is mostly assumed to happen implicitly. The goal of this study was to determine whether kindergarteners can acquire a meaningful grammatical element from the distributional properties of the input, and whether explicit instruction helps these young learners in their learning process. To test this, 102 Dutch speaking kindergarteners (M = 5;7) received training in a meaning bearing miniature language. Sentences in the language were created using a proper name, verb, grammatical marker and noun. One grammatical marker indicated the noun always referred to multiple objects, while the other indicated the noun could refer to any number of objects. 50 of the participants received explicit instruction on this regularity. After participants were exposed to this rule over 108 trials, they partook in a picture matching task during which eye movements were tracked. Our results suggest that explicit instruction did not increase accuracy but did lead to earlier predictive eye movements. Explicit instruction thus seems to influence statistical learning by kindergarteners.

TALKS

GLOBALISATION IN LINGUISTIC LANDSCAPES: NORDIC LANGUAGE MIMICRY IN MOBILE SIGNS

Janine A. E. Strandberg¹ ¹University of Groningen

Keywords: Sociolinguistics, linguistic landscapes, anthropological linguistics, writing systems.

In the 21st century, fueled by political and economic trends, the concepts "New Nordic" and "Nordic Cool" have entered the global scene in design, cuisine, entertainment, and general lifestyle (Hermansen, 2012; Skou and Munch, 2016; Andersen et al., 2019). This study explores how words and individual graphemes from Nordic languages, specifically Danish, Norwegian, Swedish, and Finnish, are increasingly capitalised on in international marketing to elevate the image of a product or brand.

Since the idea of *linguistic landscape* (LL) was introduced by Landry and Bourhis (1997), a vast number of projects have focused on language practice, policy, and ideology in public spaces (e.g. Blommaert, 2013; Blommaert and Maly, 2015; Johnstone, 2013, 2013b; Pietikäinen et al., 2011). While most LL studies are limited to specific neighbourhoods or cities, however, this qualitative research project examines the use of Nordic linguistic features on mobile signs (see Sebba, 2019) in several countries, including Belgium, the Netherlands, and Germany. The study exemplifies the use of *writing system mimicry* (Sutherland, 2015) in LLS to evoke associations of foreign cultures, focusing on the use of *faux Nordic* words and Nordic linguistic features to imply positive qualities that have recently become associated with Nordic culture and lifestyle.

References:

Andersen, L.P., Kjeldgaard, D., Lindberg, F. & Östberg, J. 2019. Nordic Branding: An Odyssey into the Nordic Myth Market. In Askegaard, S. & Östberg, J. (eds.), *Nordic Consumer Culture: State, Market and Consumers*, pp. 213–238. Cham: Palgrave Macmillan.

Blommaert, J. (2013). Ethnography, Superdiversity, and Linguistic Landscapes. Bristol: Multilingual Matters.

- Blommaert, J. & Maly, I. (2015). Ethnographic Linguistic Landscape Analysis and Social Change: A Case Study. *Tilburg Papers in Culture Studies*, 100.
- Hermansen, M.E.T. (2012). Creating Terroir: An Anthropological Perspective on New Nordic Cuisine as an Expression of Nordic Identity, *Anthropology of food*, 7.
- Johnstone, B. (2013a). "Globalization and the Production of Linguistic Locality." *SemiotiX A Global Information Magazine*.

Johnstone, B. (2013b). Speaking Pittsburghese: The Story of a Dialect. New York: Oxford University Press.

- Landry, R. & Bourhis, R. (1997). Linguistic Landscape and Ethnolinguistic Vitality: an Empirical Study. *Journal* of Language and Social Psychology, 16(3), 23-49.
- Pietikäinen, S, Lane, P., Salo, H. & Laihiala-Kankainen, S. (2011). Frozen Actions in the Arctic Linguistic Landscape: A Nexus Analysis of Language Processes in Visual Space. *International Journal of Multilingualism*, 8(4), 277-298.
- Skou, N.P., & Munch, A.V. (2016). New Nordic and Scandinavian Retro: Reassessment of Values and Aesthetics in Contemporary Nordic Design. *Journal of Aesthetics and Culture, 8*(1).
- Sutherland, P. 2015. Writing System Mimicry in the Linguistic Landscape. SOAS Working Papers in Linguistics, 17, 147-167.

TEACHING COMPLEX GRAMMAR IN DUTCH EFL CLASSROOMS. A STUDY ON THE EFFECTIVENESS OF DEDUCTIVE, INDUCTIVE, IMPLICIT AND INCIDENTAL INSTRUCTION



Marjon Tammenga-Helmantel', Sharon Steringa, Iryna Bazhutkina, Cor Suhre 'University of Groningen

Keywords: Grammar instruction, complex grammar, EFL, learning style, explicit instruction, conditionals.

This study investigates the effectiveness of four types of grammar instruction and the extent to which learning style affects effectiveness results. Given the equivocal research findings for teaching especially complex grammar structures, our focus is on such a construction, viz. English conditionals. A total of 285 Dutch secondary school students aged 15-17 and their ten teachers participated in the study. The classes were randomly distributed among the implicit, incidental, inductive and deductive treatment groups and the control group. The study has a pre-posttest design including a grammaticality judgement test, a writing test and a learning style test. Gain scores were compared after the intervention, showing that the treatment groups did not substantially differ in their effectiveness and that only the deductive approach was significantly better than the control group and only in the writing test. However, integrating learning style as an independent factor in our design revealed that only for the deductive treatment does it hold that all learning style types profit from this type of grammar instruction. We therefore recommend explicit-deductive instruction when teaching complex English conditionals. Additionally, it is concluded that taking into account learning style has added value in foreign language pedagogy.

SUBJECT OMISSION IN SPONTANEOUS COMMENTARIES

Sophie Willimann¹ ¹University of Zurich

Keywords: Subject omission, ICE-GB, spontaneous commentaries.

While English is generally considered a language that does not allow omission of the subject in finite clauses, such as in (1) below, it has been found that subject omission is not uncommon in casual conversation (Biber et al. 1999: 1104), as well as in a number of written registers, such as diaries or product labels (Haegeman 1997, 2017; Ruppenhofer and Michaelis 2010).

(1) Ø Comes back now for Neil Webb [ICE-GB S2A-003]

The present study focuses on subject omission in one specific register, spontaneous commentaries, which has not yet received much attention in this respect to date. Based on data from ICE-GB, the present study approaches subject omission from a variationist perspective (cf. Labov 1982). Both expressed and unexpressed subjects are retrieved from the corpus and analysed with respect to relevant linguistic factors, including inter alia type of (omitted) pronoun, verb semantics, and, in particular, so-called 'cognitive' factors such as subject continuity or priming/persistence. Preliminary results suggest that subject omission in spontaneous commentaries is fairly common and tends to be associated with certain prototypical linguistic characteristics.

- Biber, Douglas, Stig Johansson, Geoffrey Leech, Susan Conrad, and Edward Finegan. 1999. *Longman grammar of spoken and written English*. London: Longman.
- Labov, William. 1982. "Building on empirical foundations". In Winfred Lehmann and Yakov Malkiel (eds.), *Perspectives on historical linguistics*. Amsterdam: Benjamins, 17–92.
- Haegeman, Liliane 1997. "Register Variation, Truncation, and Subject Omission in English and in French". English Language and Linguistics 1.2: 233-270.
- Haegeman, Liliane 2017. "Unspeakable Sentences. Subject Omission in Written Registers: A Cartographic Analysis". *Linguistic Variation* 17.2: 229-250.
- Ruppenhofer, Josef and Laura A. Michaelis. 2010. "A Constructional Account of Genre-Based Argument Omissions". *Constructions and Frames* 2.2: 158-184.



Ipskamp Printing: Green Thesis Printing

FSC certified paper

FSC stands for Forest Stewardship Council and is an independent, non-profit organization which promotes responsible management of the world's forests. Products carrying the FSC-label are certified to assure you that they come from forests which are responsibly managed to meet the needs of the present and future generations.



One Tree Planted member

Through One Tree Planted we plant one tree for each order we print. These trees will be planted in the Amazon Rainforest. One Tree Planted collaborates with local partners to plant the trees to save costs and to reduce the CO2-footprint. Will you help us to preserve the rainforest? (onetreeplanted.org)

X

Recycled paper

We can now print your thesis on 100% recycled paper. This paper is called Everprint Premium and is completely new to our assortment. Only 107 kg of "old" paper is needed to produce 100 kg of Everprint Premium. Everprint Premium paper is the right choice for everybody who wants to print his or her thesis on high quality recycled paper. Currently this paper is the most environment-friendly on the market. www.proefschriften.net



YOUR **COLORS**, OUR QUALITY!



thesis and more

053-482 62 66 | info@ipskampprinting.nl

HET WAP Werkverband Amsterdamse Psycholinguïsten

Het WAP is een vereniging die professionals uit de wetenschap en het werkveld van logopedie en onderwijs bij elkaar brengt. Doel is een een brug te slaan tussen taalwetenschappelijk onderzoek en de praktijk door leden op de hoogte te houden van actuele ontwikkelingen en het organiseren van activiteiten.

WAP-symposium Taal en het Brein

OBA Amsterdam 25 januari 2020

Z.O.Z.

WAP-ACTIVITEITEN

> Tweejaarlijks symposium rond een breed taalthema

> Themamiddagen

> Interessant voor zowel praktijkgerichte als theoriegerichte professionals

WAP-BULLETIN

Elk kwartaal komt het WAP-Bulletin uit, met artikelen, congresverslagen, interviews en meer. Blijf op de hoogte van nieuwe ontwikkelingen in het taalwetenschappelijk onderzoek en de praktijk!

LIDMAATSCHAP

> Je wordt al WAP-lid voor 24 euro per jaar, slechts 15 euro voor studenten en promovendi

- > Gratis toegang tot de WAP-themamiddagen
- > Korting op toegang WAP-symposium
- > Korting op door het WAP gesponsorde congressen
- > Elk kwartaal het WAP-bulletin in je inbox

Ga naar

WWW.HETWAP.NL

en word lid!

THE SYNTAX OF SLUICING IN OMANI ARABIC

Ali Algryani⁺ ¹*Dhofar University*



Keywords: Sluicing, pseudo-sluicing, wh-movement, p-stranding, PF deletion

Sluicing refers to the ellipsis of a sentential complement of an interrogative whphrase which replaces and functions as an indirect wh-question. Omani Arabic displays sluicing constructions such as (1) which can be analysed as sluicing and/or pseudo-sluicing. This could be due to the fact that cleft structures in Omani Arabic and English are dissimilar as the former, for instance, lacks an expletive 'it' and present-tense copulas. Furthermore, wh-phrases in Omani Arabic are not inflected for case, which makes it unclear whether or not the sluiced wh-phrase displays the case of the correlate.

(1) Ali šaf had, lakin ma-aſrif meen (hu).
 Ali saw.3MS someone but NEG-know.1S. who (he)
 'Ali saw someone, but I don't know who.'

The present study attempts to explore the syntax of sluicing in Omani Arabic with respect to two main issues. First, it aims to determine whether sluices such as example (1) are instances of sluicing derived from regular wh-questions, or pseudo-sluicing, .i.e. an elliptical wh-question derived from an underlying wh-cleft source. Second, the paper seeks to explain the apparent preposition stranding (p-stranding) effects displayed by Omani Arabic sluicing despite the fact that the language is a non-p-stranding language under regular wh-movement, as in (2). (See Leung 2014; Algryani 2012; Rodrigues et al. 2009 for the same issue).

(2)	a)	Zaid	takalem	maʕa	had,	lakin	ma-aʕrif	meen	(hu).
		Zaid	talked.3MS	with	someone	but	NEG-know.1S	who	(he)
		'Zaid talked with someone, but I don't know who.'							
	b)	meen	(hu)	illi-	Zaid	takalem	ma§a-him		
		who	(he)	that	Zaid	talked.3мs	with-him.		

The p-stranding generalisation posited by Merchant (2001) is considered an argument in favour of deriving sluicing by wh-movement followed by TP deletion at PF. Given the fact that Omani Arabic uses two main strategies for forming wh-questions, it is argued that sluices displaying p-stranding effects, as in (2), are instances of pseudo-sluicing. The absence of pronominal copulas in the sluice and the omission of the preposition alongside the relative clause lead to the illusion that sluicing in Omani Arabic exhibits p-stranding effects.

References

Algryani, A. (2012) The Syntax of Ellipsis in Libyan Arabic: a generative analysis of sluicing, VP ellipsis, stripping and negative contrast. PhD Dissertation. Newcastle University.

Aelbrecht, L. (2010) The Syntactic Licensing of Ellipsis. Amsterdam: John Benjamins.

Craenenbroeck, J. van (2010) *The Syntax of Ellipsis: Evidence from Dutch Dialects*. Oxford: Oxford University Press.



- Leung, T. (2014) The Preposition Stranding Generalization and Conditions on Sluicing: Evidence from Emirati Arabic. *Linguistic Inquiry*, 45, 2, pp.332-340.
- Merchant, J. (2001) The Syntax of Silence: Sluicing, Islands, and the Theory of Ellipsis. Oxford: Oxford University Press.
- Rodrigues C., A. Nevins, & Vincente, L. (2009) Cleaving the interactions between sluicing and p-stranding. In Torck, D. & Wetzels W. L. (eds.) *Romance Languages and Linguistic Theory 2006: selected papers from 'Going Romance*', Amsterdam, 7–9 December 2006. 175–198. Amsterdam: John Benjamins.

SUB-CONSCIOUS LEARNING: THE USEFULNESS OF SUBTITLING AND CAPTIONING FOR L2 VOCABULARY ACQUISITION

*Lianne Bansema*¹ ¹University of Groningen



Keywords: SLA, language proficiency, vocabulary, subtitles, captioning

Using subtitled or captioned audio-visual media as a tool for the acquisition of second language vocabulary is becoming more popular (Winke, Gass & Sydorenko, 2010). Subtitles and captions differ in that subtitles provide the meaning of words without the original form and captions provide the form without L1 meaning (Danan, 2004). However, there is no consensus on which one is most helpful for different language learners. It has been stated that subtitles aid in comprehension (Bird & Williams, 2002) but also that they harm speech perception in the learner's target language (Mitterer & McQueen, 2009). Additionally, it is unclear whether the proficiency of the language learner has any influence on the usefulness of subtitling or captioning.

This study investigates whether the language learner's proficiency in the target language (English) influences their ability to understand and acquire vocabulary when audio-visual media is captioned or subtitled. Native Dutch VWO 1 and VWO 6 speakers participated in a viewing of subtitled and captioned audio-visual input followed by a vocabulary quiz and questionnaire. Participants are from the same school and are comparable in level of education. Significant differences between proficiency groups could aid in fine-tuning the use of subtitles and captions for all classrooms.

- Bird, S., & Williams, J. (2002). The effect of bimodal input on implicit and explicit memory: An investigation into the benefits of within-language subtitling. *Applied Psycholinguistics*, 23(4), 509-533.
- Danan, M. (2004). Captioning and Subtitling: Undervalued Language Learning Strategies. *Meta*, 49(1), 67–77.
- Mitterer, H., & McQueen, J. M. (2009). Foreign subtitles help but native-language subtitles harm foreign speech perception. *PLoS ONE 4: e7785*.
- Winke, P., Gass, S., & Sydorenko, T. (2010). The effects of captioning videos used for foreign language listening activities. *Language Learning & Technology*, *14*(1), 65-86.

BOOSTING COGNITION IN OLDER ADULTS BY MEANS OF SHORT INTENSIVE FOREIGN LANGUAGE LEARNING

Floor van den Berg^{1,2}, Eleonora Rossi^{3,4,2}, Merel Keijzer', Judith Kroll² ¹University of Groningen, ²University of California Riverside, ³University of Florida, ⁴California State Polytechnic University at Pomona

Keywords: third-age language learning, healthy aging, cognitive functioning, individual differences, lexical processing, event-related potentials (ERPs).

The rapid aging of the world population co-occurs with an increase in age-related cognitive decline. For seniors, cognitive decline may result in memory problems, a decline in executive functioning, and therefore a higher vulnerability for old-age disorders such as dementia and depression. Because a bilingual experience has been hypothesized to enhance cognitive functioning, to aid in building cognitive reserve, and to eventually attenuate cognitive decline, foreign language learning could serve as a tool to prevent old-age disorders in elders (Antoniou et al., 2013). Yet, only a few studies have attempted to investigate the cognitive effects of third-age foreign language learning, but benefits are not consistently found (Klimova, 2018). By employing a pre-test/intervention/post-test design, we aim to further investigate effects in cognitive functioning related to foreign language learning in a group of 65-80-year old healthy seniors. The intervention consists of a 10-day online Spanish course, during which participants are exposed to the language in an implicit manner. Finally, we examine event-related potentials elicited in response to spoken Spanish words before and after approximately 8 hours of learning to capture the neural signature of language learning in the early stages. Our study's goal is to provide implications for neuroplasticity and healthy aging.

References

- Antoniou, M., Gunasekera, G. M., & Wong, P. C. (2013). Foreign language training as cognitive therapy for age-related cognitive decline: a hypothesis for future research. *Neuroscience and biobehavioral reviews*, 37(10 Pt 2), 2689-98.
- Klimova, B. (2018). Learning a foreign language: A review on recent findings about its effect on the enhancement of cognitive functions among healthy older individuals. *Frontiers in human neuroscience*, *12*, 305.





ce, 12, 305.

FREQUENCY EFFECTS IN BILINGUALS' WORD PROCESSING

Vincent Boswijk^{1,2}, Hanneke Loerts^{1,2}, Matt Coler^{1,2}, Nanna Hilton^{1,2} 'University of Groningen, ²Campus Fryslân



Keywords: Frequency Effect, Lexical Decision, Salience, ERP

In order to further understand the concept of salience, we investigate the frequency effect and frequency paradox. These tell us that (1) high frequent words are easier to process, and (2) low frequent words are more easily *recognized*, while high frequent ones are more easily *recalled* (Brysbaert, et al., 2018; Lohnas & Kahana, 2013). The relationship between salience and frequency is described both as a function of high frequency and of low frequency in a way that strongly resembles these definitions. Thus, by looking closer at these concepts we might be able to reconcile the seemingly opposing views on the relationship between salience and frequency and frequency

We conducted a lexical decision task in which we compared how Dutch monolinguals and Frisian bilinguals responded to Dutch words and pseudo words. The words could have high or low frequency, and were either a cognate between Frisian and Dutch or not. In our pilot study we found evidence for the Word Frequency Effect, but no differences in Response Times for bilinguals vs. monolinguals and no effect of cognates vs. non cognates. In the coming months, we aim to extend the experiment with EEG. With the ERPs, we expect to find an effect of cognates and that the low frequent stimuli attract more attention than the high frequent ones.

- Brysbaert, M., Mandera, P., & Keuleers, E. (2018). The Word Frequency Effect in Word Processing: An Updated Review. *Current Directions in Psychological Science*, 27(1), 45–50.
- Lohnas, L. J., & Kahana, M. J. (2013). Parametric effects of word frequency in memory for mixed frequency lists. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 39(6), 1943–1946.

DOES 'AFFECT' REALLY AFFECT THE SECOND LANGUAGE?: A CORPUS EYE-TRACKING STUDY OF EMOTION PROCESSING IN THE SECOND LANGUAGE.

Jelle Brouwer', Nicolas Dirix² 'University of Groningen, ²Ghent University

Keywords: Affective processing, bilingualism, disembodied cognition, automatic vigilance

Emotion words seem to be processed differently than neutral words. A number of eye-tracking studies on L1 speakers have found that processing of both positive and negative words occurs faster than that of neutral words. Conversely, studies regarding affective processing in the L2 suggest that the relative lack of 'real-life' input causes impoverished connectivity. Furthermore, at least one eye-tracking study suggested that the processing advantage for negative words that was found in the L1 is absent in the L2. One major issue with these studies, however, is that the experimental paradigms used do not necessarily reflect naturalistic processing mechanisms. The present study, therefore, utilizes the Ghent Eye-Tracking Corpus, which was constructed by having monolinguals and bilinguals read an entire book. Due to the size of the corpus, and the lack of explicit tasks given to participants, results of this study should be more reliable and representative. Our findings seem to suggest that in naturalistic reading the faciliatory effect of emotion in the L1 is not as pronounced as other eye-tracking studies have found. Additionally, the disembodiment of emotional words in L2 speakers does not seem to occur in our dataset.

- Cop, U., Dirix, N., Drieghe, D., & Duyck, W. (2017). Presenting GECO: An eyetracking corpus of monolingual and bilingual sentence reading. *Behavior Research methods*, 49(2), 602-615.
- Scott, G.G., O'Donnell, P.J., & Sereno, S.C. (2012). Emotion words affect eye fixations during reading. *Journal of experimental psychology: learning, memory, and cognition, 38*(3), 783–792.
- Sheikh, N.A., & Titone, D. (2015). The embodiment of emotional words in a second language: an eye-movement study. *Cognition and emotion*, *30*(3), 488-500.





ESTIMATING THE LANGUAGE USE AND STATUS OF INTENSIFIERS "QUITE", "BLOODY", AND "FUCKING" IN BRITISH ENGLISH

Raoul Buurke⁺ [†]*University of Groningen*



Keywords: Intensifiers, adjective types, expressivity, quantification, context dependence

Intensifiers are pervasive in spoken language and add a personal expressive flavor to that which is being uttered. The English language has a plethora of such small but useful words, and this study focused on three specific ones: quite, bloody, and fucking. Next to their clear expressive use these words are also semantically problematic, because their contribution to sentence meaning is difficult to account for with traditional compositional models. This thesis charts the individual sociolinguistic trajectories of each intensifier at discussion, and also estimated how current speakers of English interpret and make use of these useful linguistic items. A demographic comparison of the intensifiers was made by comparing the first version of the British National Corpus (from the 1990s) with the recently compiled second version (from the 2010s), which is relevant for estimating expressivity. Next to this, a questionnaire was set up to characterize intensifier interpretation in the scope of adjectives in a setting without context influence. Data were collected and analyzed from 20 native speakers of British English, yielding the unexpected result that intensifiers are highly flexible even in written form and without contextual modulation.

MOTHERHOOD IN CZECH MASS MEDIA – CORPUS ASSISTED DISCOURSE STUDIES APPROACH



Zuzana Černá', **Radek Čech**' 'University of Ostrava

Keywords: Collocation, concordance, analysis, lemma, discourse, motherhood

The paper aims at presenting the results of an original CADS (Corpus Assisted Discourse Studies approach; Baker 2006) research, to which no similar has been conducted in the Czech Republic yet. The authors have made collocation and concordance analysis of the lemma *motherhood* and lemmas which are close to it, focusing on typical collocations of the lemma which are present in contemporary Czech mass media texts. The authors made use of the data available in the Czech National Corpus (www.korpus.cz), namely subcorpus of journalistic texts published from 2010 to 2014. For the collocation analysis, both test criteria T-score and minimum sensitivity were used. In the follow-up analysis and interpretation of the data from the perspective of the critical discourse analysis, the authors have attempted to identify categories of motherhood and identities ascribed to mothers which are present in the aforementioned corpus, making thus a step towards mapping the mass media discourse of motherhood.

References

Baker, P. (2006). Using Corpora in Discourse Analysis. London: Continuum.
Český národní korpus. Retrieved from: www.korpus.cz
Kubát, M., Hůla, J. et al. (2018). The Lexical Contet in a Style Analysis: A Word Embeddings Approach. In Corpus Linguistics and Linguistic Theory.



NOT WITH THAT ATTITUDE: TRANSLANGUAGING IN FRISIAN PRIMARY SCHOOLS

Suzanne Dekker^{1,2}

'University of Groningen, ²NHL Stenden University of Applied Sciences



Keywords: Multilingualism, multilingual education, attitudes, translanguaging

In order to implement alternative approaches for multilingual education, positive attitudes towards home languages of students and multilingualism in general are needed (Cummins, 2000). Research has shown that the home languages of migrant and minority students are often seen as tools to discuss private matters, and not as sources for learning. However, even minimal instruction on multilingual education can change these attitudes (Ellis 2004; Lee & Oxelson 2006).

Project 3M: Meer kansen Met Meertaligheid (More opportunities With Multilingualism) address the issue of attitudes in order to reshape education for multilingual pupils by implementing translanguaging pedagogies aimed at using children's primary languages as a resource. I will monitor teacher and student attitudes to map the effects of the teacher training within 3M, and measure how various didactic approaches in primary schools have an effect on language attitudes of teachers and pupils towards migrant and minority languages for the duration of the project (Pulinx, Agirdag & Van Avermaet, 2015).

I will employ surveys and implicit association tests to map attitudes towards multilingual education in migrant and minority languages (Pulinx, Agirdag & Van Avermaet 2015; Pantos & Perkins 2012). In this paper, I will present the first set of survey data.

- Cummins, J. (2000). Language, power, and pedagogy: Bilingual children in the crossfire. Clevedon: Multilingual matters.
- Ellis, R. (2004). The definition and measurement of explicit knowledge. *Language Learning*, 54, 227-275.
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. (1998). Measuring individual differences in implicit cognition: the implicit association test. *Journal of personality and social psychology*, 74(6), 1464.
- Fürstenau, S. (2016). "Multilingualism and School Development in Transnational Educational Spaces. Insights from an Intervention Study at German Elementary Schools." In A. Küppers, B. Pusch, & P. U. Pınar Uyan Semerci (eds), *Bildung in transnationalen Räumen*. Wiesbaden: Springer Fachmedien, 71-90.
- Hélot, C. (2012): "Multilingual Education and Language Awareness". In: Chapelle, C.A. (ed.), *The Encyclopaedia of Applied Linguistics*. New York: Wiley Blackwell, 258-300.
- Lee, J. S., & Oxelson, E. (2006). "'It's not my Job": K-12 Teacher attitudes towards students' heritage language maintenance." *Bilingual Research Journal* 30 (2): 453-477.
- Pantos, A.J. & Perkins, A.W. (2012). Measuring implicit and excplicit Attitudes Toward Foreign Accented Speech. *Journal of Language and Social Psychology* 32 (1): 3-20.
- Pulinx, R., Van Avermaet, P., & Agirdag, O. (2015). "Silencing linguistic diversity: The extent, the determinants and consequences of the monolingual beliefs of Flemish teachers." *International Journal of Bilingual Education and Bilingualism.*

FEEDBACK DEFICITS IN CHILDHOOD APRAXIA OF SPEECH: AN INVESTIGATION WITH ELECTROMAGNETIC ARTICULOGRAPHY

Kat Dobson', Jidde Jacobi^{1,2}, Teja Rebernik', Martijn Wieling^{1,3}, Mark Tiede³, Philippe Paquier^{4,5,6}, Anna Jansen⁴, Stefanie Keulen^{4,1,7}

¹University of Groningen, ²Macquarie University, ³Haskins Laboratories, ⁴Vrije Universiteit Brussel, ⁵Université Libre de Bruxelles, ⁶University of Antwerp, ⁷Research Foundation Flanders

Keywords: Childhood Apraxia of Speech, articulation, feedback, electromagnetic articulography, ultrasound

Childhood Apraxia of Speech or CAS is a rare, though severe articulatory disorder that supposedly is the result of a phoneme programming deficit (see also ASHA, 2007). It generally is either neurodevelopmental (possibly metabolic, or genetic) or idiopathic in nature. The disorder is considered highly therapy resistant: usually little to no progress is made and children go to a specialized educational setting. In speech and language therapy, feedback support, either of an auditory or kinesthetic nature, is generally offered in order to facilitate the acquisition process. However, up until today it is not known whether one or the other is more efficient in the selected population. In current study, we investigate whether (1) the programming deficit can be determined via a diadochokinesis task and (2) there is a difference between compensation for a series of consonant clusters as well as and vowels embedded in carrier phrases after interruption of kinesthetic feedback (via a bite block) versus auditory feedback (via pink noise masking). For this preliminary study three children with CAS and three healthy matched controls were tested with electromagnetic articulography and ultrasound. This fundamental research will be able to steer future therapeutic interventions in the most suitable direction.

References

Ad Hoc Committee on Apraxia of Speech in Children, American Speech-Language-Hearing Association. (2007). Rockville (MD): American Speech-Language-Hearing Association, Available from: www.asha.org.





RECEPTIVE MULTILINGUALISM AS A STAGE OF SECOND LANGUAGE ACQUISITION IN THE LANGUAGE DEVELOPMENT OF ADOPTED CHILDREN

Alice Fiorentino' 'Université de Reims Champagne-Ardenne



Keywords: Receptive multilingualism, second language acquisition, transnational adoptees, mobility

The study aims at bringing together receptive multilingualism and second language acquisition research. While the role played by receptive skills in formal language learning is widely recognized (Benveniste & Valli, 1997), its potential in contexts of informal language acquisition remains less explored. To fill this gap, the scope of receptive multilingualism has been extended to multilingual environments resulting from mobility and to the process of language acquisition of transnational adoptees in the first months after adoption. In transnational adoptees, the transition towards the second language happens quite abruptly and the intelligibility between their language and that of the parents can help these children to adjust to the new environment (Fiorentino, 2017). To test the role of receptive multilingualism in spontaneous acquisition, we collected 29h of interactional data with three Italian adoptive families. We investigated the acquisition of Italian as a second language by three adopted children, two of them native speakers of Spanish and one of them native speaker of Russian. Unlikely for children speaking a non-related language (Russian), in a framework of intelligible languages (Spanish-Italian), the adoption of receptive multilingualism as a strategy of communication leads adopted children to rely on a longer "receptive stage" as a strategy of adjustment.

References

Fiorentino, A. (2017). Strategies for language maintenance in transnational adoption: which role for the parents? *Journal of Home Language Research*, 2, p. 5–22.

Blanche-Benveniste, C., & Valli, A. (1997). *Eurom 4 : méthode d'enseignement de quatre langues romanes*. Firenze: Nuova Italia Editrice, 1997, 64 p.



CROSSLINGUISTIC INFLUENCE IN GREEK-ENGLISH BILINGUALS' INSTANT MESSAGING PRACTICES

Vicky Griva¹ ¹University of Groningen

Keywords: crosslinguistic influence, computer-mediated communication, Instant Messaging, borrowing, codeswitching, bilingualism.

This study focuses on the magnitude and types of lexical Crosslinguistic influence (CLI) between Greek and English through the computer-mediated communication (CMC) genre of Instant Messaging. An experiment was conducted through the WhatsApp application with 11 Greek-English bilinguals who reside in Great Britain. A unique methodological approach is included with texting discussions between the 11 participants and the researcher. The study looks at how much code-switching, borrowing and culturally bound switching (Montes-Alcalá, 2016) occur between English and Greek in the Instant Messaging practices of Greek-English bilinguals and for what reasons? But also, how does the addressee's status (formal-informal) and the topic of the text message modulate Greek-English speakers' linguistic choices?

A quantitative and qualitative approach was followed, and instances and amounts of lexical CLI were closely analyzed. It was found that substantial borrowing and code-switching occurred from English to Greek because participants live in an English-speaking country and English is the dominant language in their personal and professional lives. While, fewer amounts of culturally bound switches referring to food occurred from Greek to English, due to the importance Greek food has in determining the Greek-English bilinguals' cultural identity.

References:

Montes-Alcalá, C. (2016). iSwitch: Spanish-English Mixing in Computer-Mediated Communication. Journal of Language Contact, 9, 23-48.



MOTIVATING CHANGE: DESIGNING A COMPUTER-BASED DIALOGUE SYSTEM TO INSPIRE A PLANT-BASED LIFESTYLE

John Hoeks', Emma Zaal', Marieke Siemerink' 'University of Groningen



Keywords: Human-computer interaction, dialogue systems, persuasive communication, vegan lifestyle

How can we persuade people to eat vegan more often? Here, we report on a computer-based dialogue system in which we implemented a conversational technique called *Motivational Interviewing (MI)*. *MI* is actually a set of conversational strategies that are used by psychologists to help their clients drink less alcohol, give up smoking or stop gambling. The fact that the client's own motivation and reasons to change take center stage is the defining characteristic of *MI*.

In the first part of the project, we looked at how the various *MI* techniques that were developed specifically for face-to-face conversations could be translated into a digital dialogue system. Next, an actual dialogue system was constructed and presented to 123 participants. Analysis of how these participants evaluated the system revealed that the components of the face-to-face *MI* where indeed present in the digital dialogue system. This conclusion was confirmed by an independent coder who was an expert in therapeutic conversations. Thus, it appears we achieved a high lever of *MI Treatment Fidelity.*

To see if the intervention was effective, participants were asked about their current and future food intake. The results from this quasi-experiment show that participants intend to eat plant-based meals more often.

MEASURING DEVELOPMENT OF WRITING SKILLS: A STYLE AND GENRE-BASED APPROACH

Melanie Hof^{°,2}, Ninke Stukker², Veerle Baaijen², Kees de Glopper² 'NHL Stenden University of Applied Sciences, ²University of Groningen

Keywords: Writing development, written language, stylistics, methodology

The language we choose to express ideas determines the interpretation of our message (Biber & Conrad, 2009). When we say "The book is interesting", this can be interpreted as a fact. Whereas, when we say "We consider the book interesting.", it is clearly our opinion.

Proficient writers attune their language to the rhetorical goals they pursue (Biber & Conrad, 2009). Dutch secondary school students are insufficiently able to do that according to their teachers (Bonset, 2010). Remarkably, in writing research and education, little attention has been paid to how student writers develop the skill to formulate ideas in language (Ravid & Tolchinsky, 2002).

We will present the methodology we have developed to measure this development. We compared the language used in book reviews of professional reviewers to the language used by secondary school students of different grade levels in reviews of the same books. The differences in how these writers pursued the genre's rhetorical goals – i.e. evaluating the book and describing its content and the author's background – revealed which grammatical categories should be taken into account in order to determine the development of written language. We will present these categories and show some preliminary conclusions of what the development looks like.

References

Bonset, H. (2010). Nederlands in voortgezet en hoger onderwijs. Hoe sluit dat aan? Deel 1. *Levende Talen Magazine*, *97*(3), 16-20.

Biber, D., & Conrad, S. (2009). Register, genre, and style. Cambridge: Cambridge University Press.

Ravid, D., & Tolchinsky, L. (2002). Developing linguistic literacy: A comprehensive model. *Journal of child language*, 29(2), 417-447.





THE ROLE OF MORAL NORM VIOLATIONS IN DUTCH CHILDREN'S UNDERSTANDING OF VERBAL IRONY

Vera Hukker', Simone Sprenger', Petra Hendriks' 'University of Groningen



Keywords: Verbal irony, moral norms, expectations, false belief, pragmatics, language acquisition

From the age of five or six, children are able to detect that ironic utterances mean something different than their literal meaning. It takes several more years before children understand why a speaker uses irony and what (s)he wants the listener to know (e.g. Pexman & Glenwright, 2007). Irony can be used in reaction to the violation of moral norms (for example, that one should not hurt others) or non-social expectations (such as that it will be nice weather). When this norm or expectation is violated, a speaker may react ironically by saying: 'How nice of you!' or 'What a lovely weather!'. We investigate the role of violations of moral norms versus non-social expectations in children's development of irony understanding. Since moral norms are strongly anchored in children already from the age of three (e.g. Schmidt & Tomasello, 2010), we hypothesize that children's development of irony understanding in moral norm violation situations precedes and perhaps facilitates children's irony understanding in expectation violation situations. Five-to-eight year old children are presented with ironic and non-ironic stories, followed by questions assessing the speaker's belief, intentions and feelings. The study may shed more light on the factors underlying children's gradual development of irony understanding.

- Pexman, P. M., & Glenwright, M. (2007). How do typically developing children grasp the meaning of verbal irony? *Journal of Neurolinguistics*, 20(2), 178-196.
- Schmidt, M. F. H., & Tomasello, M. (2012). Young children enforce social norms. Current Directions in Psychological Science, 21(4), 232-236.

THE EFFECT OF THE PRIMA VISTA READING METHOD ON THE WRITTEN ENGLISH PRAGMATIC COMPETENCE OF DUTCH UPPER SECONDARY STUDENTS

*Szilvia Hunyadi'.*² 'Novalis College Eindhoven, ²University of Amsterdam

Keywords: Speech act theory, illocutionary speech acts, pragmatic competence, reader-response theory, EFL literature education, poetry reading and writing.

A recent large-scale survey on the benefits of EFL literature education within the context of Dutch secondary schools (Bloemert, et al. 2017) has found that the majority of students consider literature in a FL primarily as language education. Previous empirical research in this field mainly focused on the literary genre of prose, not poetry (Witte, 2008); furthermore, the oral output of students was preferred to the written output (Janssen, et al. 2009) or in case of poetry the focus lay on L1 learners (Peskin, 2010) or L2 college students (Hanauer, 2001), not L2 secondary students. The aim of this small-scale qualitative intervention (N = 4, ages 15-16) was to study the effect of the Prima Vista Line by Line Poetry Reading Method (Wiland, 2009) on the written English pragmatic competence of Dutch upper secondary school students. This method based on the Reader Response Theory, and in particular on the Transactional Theory (Rosenblatt, 1988) was developed to foster the primary cognitive and affective responses of students to a poem without being first exposed to the teacher's master interpretation. The intervention utilised Speech Act Theory, more specifically the Classification of Illocutionary Acts (Searle, 1976) to operationalise the written cognitive and affective responses. The analysis of the responses has shown that students exclusively tap into their knowledge of assertives and expressives from the five illocutionary speech acts. Both categories are directly linked to cognitive and affective mental processes and occur with high frequency.

References:

- Bloemert, J., Paran, A., Jansen, E., & Van de Grift, W. (2017). Students' perspectives on the benefits of EFL literature education. *The Language Learning Journal*, 1–14.
- Hanauer, D. (2001). The task of poetry reading and second language learning. *Applied Linguistics*, 22(3), 295–323.
- Janssen, T., Braaksma, T., & Couzijn, M. (2009). Self-questioning in the literature classroom; effects on students' interpretation and appreciation of short stories. *L1-Educational Studies in Language and Literature*, 9(1), 91–116.
- Peskin, J. (2010). The Development of Poetic Literacy During the School Years. *Discourse Processes*, 47(2), 77–103.
- Rosenblatt, L. M. (1988). Writing and Reading: The Transactional Theory. New York University. Retrieved from https://www.ideals.illinois.edu/bitstream/handle/2142/18044/ ctrstreadtechrepv01988i00416_opt.pdf?s
- Searle, J. (1976, April). A Classification of Illocutionary Acts. Geraadpleegd op 4 december 2014, van https://sites.duke.edu/conversions/files/2014/09/Searle_Illocutionary-Acts.pdf
- Wiland, S. M. (2009). Poetry: Prima Vista. What Foreign Language Students Can Tell Teachers about English Poetry. Saarbrücken, Germany: VDM Verlag Dr. Müller.
- Witte, T. (2008). Het oog van de meester: Een onderzoek naar de literaire ontwikkeling van havo- en vwo-leerlingen in de tweede fase van het voortgezet onderwijs. Delft: Eburon.



POSTERS

TIMING AND COORDINATION OF SPEECH IN PARKINSON'S DISEASE

Jidde Jacobi^{1,2}, Teja Rebernik¹, Roel Jonkers¹, Ben Maassen¹, Michael Proctor², Martijn Wieling^{1,3} ¹University of Groningen, ²Macquarie University, ³Haskins Laboratories



Keywords: Parkinson's disease, dysarthria, speech production, speech kinematics, articulation, speech timing

A common symptom of Parkinson's disease is progressive hypokinetic dysarthria (Ramig, Fox, & Sapir, 2008). In this type of dysarthria, articulation is one of the disturbed speech characteristics. Articulatory difficulties often lead to poor speech intelligibility and therefore affect the quality of life of patients. This ongoing project surveys articulation in Parkinson's disease by means of electromagnetic articulography (EMA) and ultrasound tongue imaging (UTI). These techniques enable us to study the movement trajectories of speech organs. Special attention is directed towards the coordination and timing of speech movements. Both individuals with Parkinson's disease as well as healthy controls will engage in four different speech tasks, which all require precise timing of speech movements. The position of the tongue, lips and jaw will be tracked over time while subjects perform the speech tasks. It is hypothesized that individuals with Parkinson's disease will show impaired timing of speech movements and will yield to more basal modes of coordination. Results from this ongoing study may improve speech therapy and may also improve diagnostic accuracy.

References

Ramig, L. O., Fox, C., & Sapir, S. (2008). Speech treatment for Parkinson's disease. Expert Review of Neurotherapeutics, 8(2), 297-309.
VIRTULAPP: USING DIGITAL TOOLS TO DEVELOP MULTILINGUAL EDUCATION IN PRIMARY SCHOOLS

Lisanne de Jong^{1,2}, Margherita Burdese^{1,2}, Joana Duarte², Marlous Visser¹ ¹*Fryske Akademie,* ²*University of Groningen*

Keywords: Multilingualism, virtual/augmented reality, language awareness, teacher development

Although today's classrooms are increasingly more linguistically diverse, this diversity is still rarely reflected in didactic approaches. Especially at primary school level, there is little room for minority and migrant languages as teachers lack knowledge on the benefits of multilingual education and the skills to implement a multilingual didactic (Fürstenau, 2016; Helot, 2016). Thus, there is a need for tools that can help teachers create an inclusive, multilingual classroom, promoting positive attitudes towards different languages.

To achieve this goal, the Virtual Language App (VirtuLApp) is a 3-year Erasmus+ project that aims to create a multiplayer VR/AR app to be used in the primary school classroom accompanied by a toolkit for the teachers with video-based documentation of suitable multilingual practices. This project takes a bottom-up approach by encouraging teachers to share their experiences with multilingual teaching practices as well as the integration of digital tools in their lessons. These interviews will provide an opportunity to identify the needs and challenges that will be addressed in the app and the toolkit. Considering that the project has only recently started, the poster will focus on the results of this preliminary needs analysis and on the pilot-version of the toolkit.

- Fürstenau, S. (2016). Multilingualism and school development in transnational educational spaces.
 Insights from an intervention study at German elementary schools. In A. Küppers, B. Pusch, P. Uyan Semerci (Eds.), *Bildung in transnationalen Räumen* (pp. 71-90). Springer VS, Wiesbaden.
 Hélot, C. (2016). Awareness Raising and Multilingualism in Primary Education. In: Cenoz J., Gorter D.,
- May S. (eds) Language Awareness and Multilingualism. Encyclopedia of Language and Education (pp. 1-15). Springer, Cham.





UNDERSTANDING ONLY STATION: A DEVELOPMENTAL PERSPECTIVE ON NOVEL IDIOM INTERPRETATION

Ruth Keßler⁺, Elfi Ebner⁺, Anne Rau⁺, Claudia K. Friedrich⁺ ⁺University Tübingen



Keywords: Idioms, decomposability, development, Theory of Mind

Idioms (such as to hit the road) are conventionalized expressions with figurative and non-compositional meaning. However, they differ in the level of decomposability, i.e. in the extent to which single word meanings relate to the figurative meaning. Developmental studies showed that children understand decomposable idioms earlier than non-decomposable idioms (Caillies & Le Sourn-Bissaoui, 2006). Furthermore, developing an understanding of how mental processes such as beliefs or intentions influence behavior (Theory of Mind), appears to relate to the understanding of non-decomposable idioms (Caillies & Le Sourn-Bissaoui, 2008). Here, we used decomposable and non-decomposable English idioms that do not have German counterparts (Beck & Weber, 2016). We translated those idioms into German and embedded them into context. We asked second and fourth graders to define the meaning of these expressions. As Theory of Mind measure, we used cartoon picture stories (Brüne & Bodenstein, 2005) and as measure for semantic abilities, we used a subtest of the Heidelberger Sprachentwicklungstest (Grimm & Schöler, 1998). Surprisingly, children across both age groups performed better on non-decomposable than on decomposable idioms. While semantic abilities seemed to play a role for both types of idioms, *Theory of Mind* abilities was only related to the understanding of non-decomposable idioms.

References

Beck, S. D. & Weber, A. (2016). English-German Database of Idiom Norms (DIN).

- Brüne, M., & Bodenstein, L. (2005). Proverb comprehension reconsidered 'theory of mind' and the pragmatic use of language in schizophrenia. *Schizophrenia Research*, *75*(2-3), 233-239.
- Caillies, S., & Le Sourn-Bissaoui, S. (2006). Idiom comprehension in French children: A cock-and-bull story. *European Journal of Developmental Psychology*, 3(2), 189-206.
- Caillies, S., & Le Sourn-Bissaoui, S. (2008). Children's understanding of idioms and theory of mind development. *Developmental Science*, *11*(5), 703-711.
- Grimm, H., & Schöler, H. (1998). Heidelberger Sprachentwicklungstest (HSET). Göttingen: Hogrefe.

A BILINGUAL VIEW ON TRANSMASCULINE VOICE CHANGE

POSTERS

Remco Knooihuizen⁺, Max Reuvers⁺ ⁺University of Groningen

Keywords: Sociolinguistics, bilingualism, transgender, identity, phonetics

Transgender men undergoing hormone replacement therapy through the administration of testosterone undergo physiological changes to their larynx and vocal folds that result in lower pitch. These changes are relatively well understood through research in medicine and speech therapy (Azul, 2015; Azul et al., 2017). But masculinity in voice depends on other cues than pitch as well; some of these may be physiological in nature, and others call for a sociolinguistic approach (Zimman, 2017).

Teasing apart the physiological and the sociolinguistic in transmasculine voice change is tricky, as there is great inter- and intra-speaker variation in the range of masculinities and other identities conveyed in speech (Zimman, 2018). To shed another light on this debate, we present data from a case study of a bilingual transmasculine speaker with differential socialisation in his two languages, Dutch and English.

Longitudinal data from monthly conversations of approx. 20 minutes in each of the two languages, starting simultaneously with hormone replacement theory, is analysed for (a) pitch, (b) vowel formants, and (c) spectral properties of /s/. We offer a sociophonetic interpretation and suggest avenues for further research.

- Azul, David. 2015. Transmasculine people's vocal situations: A critical review of gender-related discourses and empirical data. *International Journal of Language and Communication Disorders* 50(1). 31–47.
- Azul, David, Ulrika Nygren, Maria Södersten & Christiane Neuschaefer-Rube. 2017. Transmasculine people's voice function: A review of the currently available evidence. *Journal of Voice* 31(2). 261. e09–261.e23.
- Zimman, Lal. 2017. Gender as stylistic bricolage: Transmasculine voices and the relationship between fundamental frequency and /s/. Language in Society 46(3). 339–370.
- Zimman, Lal. 2018. Transgender voices: Insights on identity, embodiment, and the gender of the voice. *Language and Linguistics Compass* 12(8). e12284.



POSTERS PRESSING LGBT IDENTITY IN A MINORITY LANGUAGE

Remco Knooihuizen', Lysbeth Jongbloed-Faber', Martine Jansen' 'University of Groningen

Keywords: Sociolinguistics, identity, LGBT, Frisian, minority languages

LGBT youth use linguistic practices to construct their sexual and gender identities (Munson & Babel, 2007). In this poster, we discuss whether young LGBT speakers of Frisian do this as well.

There are reasons to assume that sexual and gender identity expression is not prevalent in Frisian. Frisian functions predominantly as a home language. The dominant language of socialisation in schools is Dutch, especially in urban areas, and it is likely that identity expression occurs mostly in that language — and perhaps in English (cf. Vriesendorp & Rutten, 2017). Secondly, Frisian is associated with rurality and with conservative values and ideals of gender roles that may not square with an LGBT identity.

In our project researching the language of Frisian LGBT youth, we record sociolinguistic interviews with Frisian-speaking youth aged 16–22 of various genders and sexualities, as well as more controlled data from a reading passage. Potential variables include fronted /s/ (Mack & Munson, 2012; Pharao et al., 2014; Bekker & Levon, 2017; Munson et al., 2017) and final *-sk* clusters (Hilton et al., 2012).

We hope that this work inspires more research into language variation and LGBT identity in minority or peripheral language communities.

- Bekker, I. & Levon, E. (2017). The embedded indexical value of /s/-fronting in Afrikaans and South African English. *Linguistics* 55. 1109–1139.
- Hilton, N.H et al. (2012). The effect of writing skills on phonetic variation: The case of word-final /sk/ in Frisian. Paper presented at Dei fan de Fryske taalkunde, Fryske Akademy, Leeuwarden, 14 December 2012.
- Mack, S. & Munson, B. (2012). The influence of /s/ quality on ratings of men's sexual orientation. Journal of Phonetics 40. 198–212.
- Munson, B. & Babel, M. (2007). Loose lips and silver tongues, or, projecting sexual orientation through speech. *Language and Linguistics* Compass 1. 416–449.
- Munson, B. et al. (2017). Implicit and explicit gender priming in English lingual sibilant fricative perception. *Linguistics* 55. 1073–1107.
- Pharao, N. et al. (2014). Indexical meanings of [s+] among Copenhagen youth. *Language in Society* 43. 1–31.
- Vriesendorp, H. & Rutten, G. (2017). 'Omg zo fashionably english'. Taal en Tongval 69. 47–70.



AM I A JOKE TO YOU? - HOW DUTCH HIGH SCHOOL STUDENTS PERCEIVE AND USE WORDPLAY AND PUNS IN ENGLISH.

POSTERS

Jelmer Moojen¹ ¹University of Groningen

Keywords: Wordplay, puns, perception, second language acquisition.

To understand wordplay, a certain level of proficiency in a language is required. Existing literature suggests that students of a second language start recognizing implicit messages after reaching CEFR level B1 (Rose, Lightbown, & Spada, 1995; Staatsen, Heebing, & Renselaar, 2009). However, it is noted that this recognition happens in combination with visual cues, like raising an eyebrow. Classroom evidence has shown that students use and recognize wordplay and puns before reaching CEFR level B1. In this poster, I discuss whether Dutch high school students are able to recognize wordplay and puns in L2 English at an earlier level than B1.

To investigate this, students (N=12O) from the first three years of gymnasium (two classes per year so six classes in total) were asked to fill in a questionnaire on the understanding of wordplay and puns based on Arnaud, Maniez, & Renner, 2015 and Locker, 2006. These years were chosen because the target level of English during these years is between A1 and B1(Staatsen et al., 2009). Each student was given a score based on their level of recognition of wordplay and puns (Burrell & Beard, 2018), which was then compared to the scores from different CEFR levels. The CEFR levels of each student were determined by their teacher using grades of the current year.

- Arnaud, P. J. L., Maniez, F., & Renner, V. (2015). Non-Canonical Proverbial Occurrences and Wordplay: A Corpus Investigation and an Enquiry Into Readers' Perception of Humour and Cleverness. Wordplay and Metalinguistic / Metadiscursive Reflection, 135–160.
- Burrell, A., & Beard, R. (2018). Language play in the narrative writing of 9–11-year-olds. *Education 3-13*, 46(5), 547–562.
- Lockyer, S. (2006). Heard the One About ... Applying Mixed Methods in Humour Research? International Journal of Social Research Methodology, 9(1), 41–59.
- Rose, K. R., Lightbown, P. M., & Spada, N. (1995). How Languages Are Learned. *TESOL Quarterly*, 29(1), 197.
- Staatsen, F., Heebing, S., & Renselaar, E. van. (2009). *Moderne vreemde talen in de onderbouw*. Bussum: Coutinho.





ON SPEAKING TERMS: A LONGITUDINAL STUDY EXAMINING THE RELATIONSHIP BETWEEN EARLY SPEECH-SOUND PRODUCTION AND LATER LITERACY OUTCOMES

Marjolein Mues^{1,2}, Jennifer Zuk^{2,3}, Elizabeth Norton^{4,5}, Ola Ozernov-Palchik⁴, Tiffany P. Hogan⁶, John D. E. Gabrieli⁴, Nadine Gaab^{2,3,7}

¹University of Groningen, ²Labs of Cognitive Neuroscience, Division of Developmental Medicine, Boston Children's Hospital, ³Harvard Medical School, ⁴McGovern Institute for Brain Research and MIT Integrated Learning Initiative, ⁵Northwestern University, ⁶SAiL Literacy Lab, Massachusetts General Hospital, ⁷Harvard Graduate School of Education

Keywords: Speech delay, literacy, childhood

Speech delay (SD) – inaccurate speech-sound production in early childhood – has been linked with poor subsequent reading outcomes in some children, but not all (Overby et al., 2012; Hayiou-Thomas, 2017). The nature of this complex relationship remains unclear (Peterson et al., 2009). Disentangling potential contributing factors offers the potential to better inform strategies for early identification and intervention of reading difficulties. Therefore, the present study investigated the following research questions:

 What factors influence the relationship between SD and subsequent reading skills?
 Which factors distinguish between children with SD who subsequently develop good versus poor word reading outcomes?

This study draws from a larger longitudinal investigation from kindergarten to second grade. In that sample, 40% of children with SD demonstrated poor reading abilities. Our preliminary results suggest that children with SD who develop good compared to those developing poor reading skills, significantly differ in rapid automatized naming and letter-sound knowledge. Together with phonological processing, these factors mediate the relationship between speech accuracy and reading. Interestingly, socioeconomic status and early language abilities did not play a mediating role. Our results replicate the substantial comorbidity between SD and reading difficulties and imply the need for early literacy screening for children with SD.

- Hayiou-Thomas, M.E., Carroll, J.M., Leavett, R., Hulme, C. & Snowling, M.J. (2017). When Does Speech Delay Matter for Literacy? The Role of Disordered Speech Errors, Co-Occuring Language Impairment and Family Risk of Dyslexia. *Journal of Child Psychology and Psychiatry, 58*(2), 197-205.
- Overby, M.S., Training, G., Smit, A.B., Bernthal, J.E. & Nelson, R. (2012). Preliteracy Speech Sound Production Skill and Later Literacy Outcomes: A study using the Templin Archive. *Lang Speech Hear Serv Sch*, 42(1), 97-115.
- Peterson, R.L., Pennington, B.F., Shriberg, L.D. & Boada, R. (2009). What Influences Literacy Outcome in Children with speech delay? *Journal of Speech, Language and Hearing Research*, 52(5), 1175-1188.

THE INFLUENCE OF L2 ON L1: A STUDY ON HOMONYMS AND COGNATES IN ENGLISH AND ITALIAN.

POSTERS

Paola Mureddu', Esli Struys' 'Vrije Universiteit Brussel

Keywords: Bilinguals, Lexical Decision Task, Cognates, Homographs, Revised Hierarchical Model, Bilingual Interactive Activation model.

Does our second language (L2) have an influence on how we process our first language (L1)? The study, conducted within the framework of mixed language processing, explored these mechanisms in Italian-English late bilinguals, focusing on the opposition between the Revised Hierarchical Model (RHM) (Kroll & Stewart, 1994) which assumes separate lexical stores in bilinguals, and the Bilinguals Interactive Activation Model (BIA) (Dijkstra & van Heuven, 1998), which assumes one common store for both languages. Four groups of Italian-English bilinguals, 73 participants in total, belonging to different high school programs (traditional and intensive) and grades (11th and 13th), carried out two language specific lexical decision tasks, one per language, of 60 items each. In each task participants were exposed to three different kind of stimuli: cognates, homographs, and non-words in series of 20 items. Significant differences were found within each group between real words (cognates and homographs) and non-words. The other results of the study were not statistically significant, suggesting that learners' L2 does not influence L1 at the language proficiency level that Italian students obtain during high school.

- Dijkstra, T., & van Heuven, W. (1998). The BIA model and bilingual word recognition. In J. Grainger, & A. Jacobs (eds.), *Localist connectionist approaches to human cognition* (pp. 189-225). Hilsdale: Lawrence Erlbaum Associate.
- Kroll, J., & Stewart, E. (1994). Category interference in translation and picture naming: Evidence for asymmetric connections between bilingual memory representations. *Journal of Memory and Language*, 149-174.



'GOOD ENOUGH' PROCESSING IN LOCALLY CASE-AMBIGUOUS GERMAN LONG-DISTANCE WH-QUESTIONS: EVIDENCE FROM SELF-PACED READING

David Öwerdieck', Ankelien Schippers', Margreet Vogelzang' 'University of Oldenburg



Keywords: Long-distance wh-questions, self-paced reading, case ambiguity, processing

We report on a self-paced reading and comprehension task comparing subject long-distance (LD) questions (1) to object LD-questions (2), where we manipulated case-marking on the embedded DP (case-unambiguous *der/den* vs. case-ambiguous *die* NPs).

- Welche-r Manager denkst du, dass den/die Pianist(-in) respektiert hat?
 Which-nom manager think you, that the.acc/the.? pianist(-fem) respected has?
 'Which manager do you think respected the pianist?'
- Welche-n Manager denkst du, dass der/die Pianist(-in) respektiert hat?
 Which-nom manager think you, that the.nom/the.? pianist(-fem) respected has?
 'Which manager do you think the pianist respected?'

Our results show several interesting, novel findings: conditions with caseunambiguous embedded DPs show a significant relative slow-down at the embedded DP for subject questions, but good overall comprehension. With case-unambiguous DPs, however, this slow-down occurs later (at the participle and auxiliary), and subject questions are being misinterpreted as object questions in 47% of the cases. Following Kiziak (2010), we explain the bad performance on subject LD-questions under Ferreira & Patson's (2007) 'good enough' approach, which assumes comprehenders sometimes use simple heuristics in processing, resulting in local interpretations that interfere with global ones. Finally, we argue that our results provide behavioural evidence for the problematic status of subject gaps (cf. Rizzi & Shlonsky, 2007).

- Ferreira, F. & N. D. Patson (2007), "The 'good enough' approach to language comprehension". Language and Linguistics Compass 1, 71-83.
- Kiziak, T. (2010). Extraction Asymmetries: Experimental Evidence from German. Amsterdam & Philadelphia: John Benjamins.
- Rizzi, L. & U. Shlonsky (2007), "Strategies of Subject Extration". In: G\u00e4rtner, H.-M. & U. Sauerland (eds.), Interfaces + Recursion = Language? Berlin: Mouton de Gruyter, 115-160.

3D CUBES AND VALENCY GRAMMAR TO UNDERSTAND PRONOUNS IN ITALIAN: A CASE STUDY



Roberta Pittaluga' 'Saint Petersburg State University

Keywords: Valency grammar, language acquisition, Italian as a second language

Pronouns are one of the most difficult categories to understand when studying an L2. The situation becomes even more complicated if the L1 is typologically different from L2 (as in the case of Russian and Italian). Even though pronouns exist in Russian, they are used differently.

In this matter, I believe Valency Grammar can be applied. By assigning the key role in the sentence to the verb, Valency Grammar is an intuitive, easy to understand and comprehensive model (De Santis, Lo Duca) which can visually demonstrate how sentences work. It is not possible to study the structure of a predicate without considering the valency of the verb on which the type and number of arguments are established, as in the case of chemical elements.

The potentiality of Valency Grammar can be exploited at a deeper level. A system of 3D cubes reproduces verbs' valencies: each verb can attract their argument(s) and each argument corresponds to a concrete pronoun. Students are thus provided with a visual and tactile tool they can actually use instead of memorising lists of verbs followed by their prepositions while trying to connect the pronoun with its meaning in a rather abstract way.

References

 De Santis, C. (2017). Che cos'è la grammatica valenziale. Roma: Carocci.
 Lo Duca, M. (2018). Esperimenti grammaticali. Riflessioni e proposte sull'insegnamento della grammatica dell'italiano. Roma: Carocci.



HYPHENATION AS READING AID IN GERMAN COMPOUNDS – AN EYETRACKING STUDY

Caroline Postler' 'Carl von Ossietzky Universität Oldenburg



Keywords: Eyetracking, compound processing, hyphenation, reading aid, German compounds

In German, compounds are usually written concatenated. In my eyetracking study I investigate the influence of the hyphen as a possible reading aid in German occasional compounds. A hyphen visually separates a compound into its main components, but at the same time indicates its unity (cf. Bredel 2008). In my study, both right- and left-branching compounds are investigated. Since left-branching is the prevalent structure of German compounds (cf. Wellmann 1991), a positive effect for the hyphenated spelling is to be expected in the rarer case of right-branching compounds. Further, the structure of the graphematic syllable with length-containing letters at the syllable margins is of importance as a reading aid of three- and foursyllable words (cf. Fuhrhop/Buchmann 2009; Drews 2011). Compounds without length-containing letters, e.g. "Bananensamenaussaat" (banana seed sowing), should therefore be more difficult to read than "Bananensamen-Aussaat", since in this case the hyphen takes on a syllable- and morpheme-structuring function. In addition, the number of syllables is assumed to be a factor for the read-supporting function of the hyphen. Prior to the eyetracking study, a questionnaire study was examined with other participants to investigate the orthographic acceptance of the hyphenated spelling in the compounds.

- Bredel, U. (2008). Die Interpunktion des Deutschen. Ein kompositionelles System zur Online-Steuerung des Lesens. Tübingen: Niemeyer.
- Drews, C. (2011). Werden längenhaltige Wörter schneller gelesen als längenlose? Masterarbeit Universität Oldenburg.
- Fuhrhop, N., & Buchmann, F. (2009). Die L\u00e4ngenhierarchie. Zum Bau der graphematischen Silbe. In: Linguistische Berichte, 218, p. 127-155.
- Wellmann, H. (1991). Morphologie der Substantivkomposita. In: Ortner, L., Müller-Bollhagen, E., Ortner, H., Wellmann, H., Pümpel-Mader, M., & Gärtner, H. (Eds.): Deutsche Wortbildung. Typen und Tendenzen in der Gegenwartssprache. Band 4: Substantivkomposita. Berlin: De Gruyter, p. 3–111.

THE EFFECT OF LEVODOPA AND FATIGUE ON DYSARTHRIC SPEECH OF SLOVENE PATIENTS WITH PARKINSON'S DISEASE

Teja Rebernik', Jidde Jacobi'.², Roel Jonkers', Michael Proctor², Martijn Wieling^{1,3} 'University of Groningen, ²Macquarie University, ³Haskins Laboratories

Keywords: Parkinson's disease, speech acoustics, speech production, Slovenian language.

Parkinson's Disease (PD) is the second most common neurodegenerative disease in the world, affecting millions of people (Parkinson's Foundation, 2018). Besides the generally known motor symptoms such as tremor and problems with gait, PD patients also often suffer from speech problems, i.e. hypokinetic dysarthria. Symptoms of the latter include monopitch, monoloudness, imprecise articulation of vowels and consonants, diminished prosody, and a breathy, harsh voice (Walsh and Smith, 2012). While there is no cure for PD, the drug that is used for treating and relieving motor symptoms is Levodopa. However, it is currently unclear how exactly Levodopa affects speech, as studies have shown both detrimental and beneficial effects (Skodda, Visser and Schlegel, 2011; de Letter et al., 2010).

The aim of the study was to determine the effect of Levodopa and fatigue on several speech parameters, including vowel space area, voice onset time of plosives, voice quality, and speech rate. 10 Slovenian participants (6 with PD and 4 healthy controls) recorded their speech with a headset microphone on twenty occasions, performing four tasks each time. While the data is still in the process of being analysed, this study is the first to investigate the acoustic profile of Slovenian PD patients.

References

Letter, M. de, Borsel, J. van, Boon, P., Bodt, M. de, Dhooge, I., & Santens, P. (2010). Sequential changes in motor speech across a levodopa cycle in advanced Parkinson's disease. *International Journal* of Speech-Language Pathology, 12(5). 405–413.

Parkinson's Foundation. (2018). Statistics. Retrieved from http://parkinson.org

Skodda, S., Visser, W., & Schlegel, U. (2011). Vowel Articulation in Parkinson's Disease. *Journal of Voice*, 25(4), 467–472.

Walsh, B., & Smith, A. (2012). Basic parameters of articulatory movements and acoustics in individuals with Parkinson's Disease. *Movement Disorders*, 27(7), 843–850





NOUN CAPITALIZATION: CAN DUTCH READERS BENEFIT FROM IT?

Pol van Rijn', Margreet Vogelzang' 'Carl von Ossietzky University Oldenburg



Keywords: Capitalization, core of the noun group, determiner, highlighting, eyetracking, reading times.

It has been suggested that noun capitalization as in German has processing benefits; by specifically marking a certain part of speech (here N as the head of the Noun Phrase), processing of syntactic structure is facilitated (Günther, 1998; Günther & Nünke, 2005). It is disputed whether other languages, such as Dutch, could benefit from such emphasis. Previous studies have obtained contradicting results: Gfroerer, Günther & Bock (1989) found that texts with capitalized nouns are read significantly quicker than texts following the rules of Dutch orthography, however Bock, Hagenschneider & Schweer (1989) obtained opposite results. Additionally, other cues can assist readers to identify an NP, such as a determiner. To examine the effect of capitalization as a reading aid in Dutch, we ran an eye-tracking study comparing the effects of capitalized noun phrases with and without a determiner to the official, de-capitalized, spelling in 4 short texts. Preliminary analyses with data from 15 participants show that capitalization slows down reading compared de-capitalized nouns (p < 0.001). Interestingly, this slow-down was only present for NPs without a determiner. This indicates that capitalization, at least in our short study without training, did not aid reading and that signaling an NP (with a determiner) seems important for processing.

- Bock, M., Hagenschneider, K., & Schweer, A. (1989). Zur Funktion der Groß- und Kleinschreibung beim Lesen deutscher, englischer und niederländischer Texte. In P. Eisenberg & H. Günther (Eds.): Schriftsystem und Orthographie (p. 23–55). Tübingen: Niemeyer.
- Günther, H. (1998). Sprachwissenschaft und Sprachdidaktik. Am Beispiel kleiner und großer Buchstaben im Deutschen. *Didaktik Deutsch, 4,* 4–20.
- Günther, H. & Nünke, E. (2005). Warum das Kleine groß geschrieben wird, wie man das lernt und wie man das lehrt. *Kölner Beiträge zur Sprachdidaktik, 1*, 1–56.
- Gfroerer, S., Günther, H., & Bock, M. (1989). Augenbewegungen und Substrantivgroßschreibung eine Pilotstudie. In P. Eisenberg & H. Günther (Eds.): *Schriftsystem und Orthographie* (p. 111–135). Tübingen: Niemeyer.

THE EFFECT OF INPUT RELIABILITY IN ADULT SECOND LANGUAGE CROSS-SITUATIONAL WORD LEARNING

Natalia A. Rivera-Vera', Padraic Monaghan', Sible Andringa', Edmundo Kronmüller' 'University of Amsterdam

Keywords: Cross-situational word learning, speaker's reliability, second language learning, selective learning

Acquiring new words requires a learner to assess the linguistic input but also the source who provides it, e.g. the speaker. Based on previous findings in children's selective word learning¹, we adapt a cross-situational word learning task and manipulate the reliability of the linguistic input provided by a specific speaker. In particular, we manipulate the co-occurrence reliability between a word and an object, creating two between-subjects' experimental conditions based on how consistently the speaker (presented as an L2 learner) mapped a word to an object. In the reliable condition, the speaker maps each word to one specific object ("reliable items"). In the unreliable condition, the speaker, along the reliable items, introduces "unreliable" ones, i.e. words mapped to different objects in each trial. We assess whether adult L2 word learning of the reliably mapped words is affected by this manipulation. Pilot data (N=8) show a trend toward lower accuracy across blocks for reliably mapped items of participants in the unreliable condition (mean=81%, sd=15%) compared to the reliable condition (mean=89%, sd=11%). We are currently collecting data (expected sample size of 60) and aim to assess whether judgments about the speaker predict L2 learners word acquisition above and beyond our reliability manipulation.

References

Mills, C. M. (2013). Knowing when to doubt: developing a critical stance when learning from others. Developmental psychology, 49(3), 404.





CHANGE-OF-STATE EVENTS AND THE SEMANTICS OF VERBS ACROSS LANGUAGES

Miguel Santin', Angeliek van Hout', Monique Flecken² 'University of Groningen, ²Max Planck Institute for Psycholinguistics



Languages differ in how verb constructions encode the manner and the result of events in which objects undergo a change of state: *resultative events* (e.g. when blowing out a candle, blowing is the manner of action and the result of the event is an extinguished candle). While some languages seem to have a preference for encoding results in the semantics of verbs (e.g. Spanish), other languages seem to prefer to use verbs for encoding manner (e.g. Dutch). These cross-linguistic lexicalization preferences have been used to classify languages regarding two main typological patterns: *verb-framed* and *satellite-frame*, depending on whether or not event results are habitually encoded in verbs in a language.

Traditionally, verb semantics have been investigated based on the intuition of linguists and a handful of informants. However, these studies have missed to connect their research to event cognition theories and use experimental methodologies to test their theories. In the present study, we will introduce a novel method for studying event semantics and examine the degree to which verb semantics denote a change of state in objects. By using the advantages of online surveys, we intend to experimentally test to what degree do verbs in Spanish, Greek, English, Dutch and Mandarin follow a verb- or a satellite-framed pattern for encoding change-of-state events. We will present the data of more than 300 native speakers per language regarding 36 different event.

TWO GRAMMARS, ONE SPEAKER: THE CASE OF LOW GERMAN VERBAL CLUSTERS



Marie Schnieders', Ankelien Schippers' 'University of Oldenburg

Keywords: Verb order, German

We investigated the acceptability of different word orders in verb clusters, comparing judgements in Low German (LG) to High German (HG). We looked at 2-verb participle+auxiliary and participle+modal clusters and at auxiliary-modal-participle 3-verb clusters, which in HG show the Infinitivus Pro Participio (IPP) effect. In addition to establishing word order preferences in LG verb clusters, we wanted to know if and how LG and HG judgements diverged. The results reveal the following: in 2-verb clusters, 1-2 orders receive low ratings in both LG and HG, but this order is more acceptable for clusters with a modal compared to clusters with an auxiliary. This is in line with other Germanic varieties, where 1-2 orders are more common for clusters with modals (Wurmbrand, 2018). For 3-verb clusters, participants clearly differentiated between LG and HG. While in HG, the 1-3-2 order receives the highest acceptability rates, the 3-2-1 order was judged most acceptable in LG. This order was deemed completely unacceptable in HG (contrasting with Bader & Schmid, 2009). We attribute this latter result to the absence of the ge-prefix and IPP in LG. In this respect, LG patterns with Lower Saxon dialects spoken in the Netherlands (Barbiers et al. 2008).

- Bader, M., & Schmid, T. (2009). Verb clusters in colloquial German. *The Journal of Comparative Germanic Linguistics*, 12(3), 175-228.
- Barbiers, S., Van der Auwera, J., Bennis, H., Boef, E., De Vogelaer, G. & M. van der Ham (2008). Syntactische Atlas van de Nederlandse Dialecten. Amsterdam: Amsterdam University Press.
- Wurmbrand, S. (2018). Verb clusters, verb raising, and restructuring. *The Wiley Blackwell Companion to Syntax, Second Edition*, p. 1-109.



PROCESSING RESTRICTIVE AND NON-RESTRICTIVE RELATIVE CLAUSES IN L1 AND L2 LEARNERS: A CORPUS AND AN EYE-TRACKING STUDY

Pouran Seifi', Marjolijn Verspoor ', Hanneke Loerts ', Pim Mak ' 'University of Groningen



Keywords: Restrictive and non-restrictive relative clauses, second language, complementizer 'Ke'.

A relative pronoun introduces a relative clause (RC) in English and in some sentences, they can be omitted. Complementizer 'Ke' which introduces all types of RCs cannot be deleted in Persian. Restrictive and non-restrictive RCs are clearly differentiated in Persian. In non-restrictive RCs, the head noun carries an enclitic morpheme(-i) which links the head noun to the following RC. To interpret the components that control the frequency and predict difficulty and ease of processing, we created a Persian corpus. Based on this corpus study, restrictive RCs are more frequent than non-restrictive ones. Comparing subject and object RCs revealed that non-restrictive RCs are the least frequent ones. For the eye-tracking study, we created two experiments. In experiment one, we tested subject and object restrictive and non-restrictive RCs in English as the second or foreign language of the Persian students. In experiment two, we examined the same stimuli in Persian. We hypothesized that processing Persian sentences with restrictive RCs would be easier than non-restrictive ones and processing non-restrictive object RCs will be difficult. However, the relative pronoun in non-restrictive RCs in English will ease their processing.

ENGLISH AND THE USE OF SIMPLE PAST IN DUTCH

POSTERS

*Jikkie Veenstra*¹ ¹University of Groningen

Keywords: language contact, contact-induced language change

English and Dutch differ in their use of the simple past versus the present perfect. In English, the simple past is much more frequent than the present perfect, whereas in Dutch this is the other way around. Recently, Dutch seems to be changing in the direction of English. Since the Dutch have a high proficiency in English (e.g. Edwards, 2016; Mackenzie, 2017), could this be contact-induced change? To answer this question, we used a grammaticality judgment questionnaire, which included sentences constructed in accordance with Dutch standard grammar, as well as sentences that align with English usage. This was combined with information about respondents' background, e.g. their proficiency in, use of and exposure to English. The questionnaire was filled in by 281 native speakers of Dutch. The results of this questionnaire show that the acceptance of the sentences that follow the English use of the simple past does seem to be correlated with the respondents' relation to English, especially with regard to exposure to English.

References

Edwards, A. (2016). *English in the Netherlands: Functions, Forms and Attitudes*. Amsterdam: John Benjamins Publishing Company.

MacKenzie, I. (2017). Language Contact and the Future of English. New York: Routledge.



BOTH THEMATIC ROLE AND NEXT-MENTION BIASES AFFECT PRONOUN USE IN DUTCH

Jorrig Vogels' 'University of Groningen



Keywords: Dutch, next-mention biases, predictability; pronouns; referring expressions; thematic role

An important question is whether speakers take listeners' expectations into account when choosing whether to use a pronoun. Recently, it has been argued that whether predictability plays a role in pronoun use depends on the thematic roles of the verb in the preceding clause (Rosa & Arnold, 2017). The aim of this study was to disentangle predictability effects on pronoun use from thematic-role effects in Dutch. We conducted two web-based written continuation experiments, in which we manipulated the next-mention bias by (1) varying the social status of the referents, which makes the lower-status referent more likely to be mentioned next (see Garvey et al., 1974); and (2) inserting the adverb eerst 'first', which is predicted to create a strong expectation for a subject continuation (cf. Kehler et al., 2008). Experiment 1 confirmed that these manipulations shifted the preferred referent from NP2 to NP1. Experiment 2 showed that when the referent was congruent with this bias, participants produced more personal pronouns as well as more reduced forms compared to full forms. By contrast, thematic role mainly affected demonstrative pronoun use. Thus, thematic role and predictability both seem to affect the choice of referring expression in Dutch, but in different ways.

- Garvey, C., Caramazza, A., & Yates, J. (1974). Factors influencing assignment of pronoun antecedents. *Cognition*, 3(3), 227–243.
- Kehler, A., Kertz, L., Rohde, H., & Elman, J. L. (2008). Coherence and Coreference Revisited. Journal of Semantics, 25(1), 1–44.
- Rosa, E. C., & Arnold, J. E. (2017). Predictability affects production: Thematic roles can affect reference form selection. *Journal of Memory and Language*, 94, 43–60.

IMPRESSION FORMATION ON ONLINE DATING SITES: EFFECTS OF LANGUAGE ERRORS IN PROFILE TEXTS ON PERCEPTIONS OF PROFILE OWNERS' ATTRACTIVENESS

Tess van der Zanden', Maria Mos', Alexander Schouten', Emiel Krahmer' 'Tilburg University

Keywords: Language use, language errors, online dating, dating profiles, impression formation, interpersonal attraction.

Online dating profile texts contain important cues that aid the impression formation process. In order to form a reasoned impression, people do not only rely on cues intentionally given by a profile owner (i.e. profile content), but also on cues that are unintentionally given off. Language errors may be one such unintentional cue. To investigate whether and how a cue like the occurrence language errors affects impression formation, we conducted two experimental studies, in collaboration with the Dutch dating site Parship. In Study 1, we examined whether language errors negatively affect perceptions of attraction, and whether this effect is moderated by the presence of visual information, i.e. the profile picture. Results revealed that errors negatively affect perceptions of romantic-social attractiveness, and that a blurred picture negatively affects perceptions of physical attractiveness. Study 2 focused on mechanical, rule-based and informal language errors; different errors that can each be attributed to different personality traits. Results showed that mechanical and rule-based errors lead to lower scores on, respectively, perceived attentiveness and intelligence, which then mediated lower scores on attractiveness and dating intention. These findings highlight the importance of (error-free) language use as a cue in impression formation.





VOCAL EFFORT AS AN EXPLANATION OF VOWEL SPACE SHIFT AFTER TREATMENT OF ORAL CANCER

Xinyu Zhang¹, Rob van Son^{2,3}

¹University of Amsterdam, ²Nederlands Kanker Instituut – Antoni van Leeuwenhoek, ³Amsterdam Center for Language and Communication



Keywords: pathological speech, vowel space, long-term-average-spectrum slope, HNR, voice quality, oral cancer.

Treatment of oral cancer affects speech especially when cancer arises in or involves the oral cavity or the oropharynx. The present study is a follow-up of van Son et al. (2018) where the authors found an overall shift of vowel space towards an area of both higher F1 and higher F2 values after oral cancer treatment. This study further investigates the shift of the vowel space observed in the original experiments and analyzes the cause of the shift by examining the slope of the long-term average spectrum (LTAS) and the harmonic-to-noise ratio (HNR) pre- and post-treatment. Results show that there is a positive correlation between the /a/-distance in the vowel space and the flatness of the LTAS slope. The flatness of the LTAS slope indicates either increased sound energy or insufficient subglottal closure. Examination of HNR rules out the possibility of insufficient subglottal closure. Taking into account that the vowel space shift denotes a lower and more front place of articulation (to decrease dampening at the filter level), increased vocal effort (to increase sound energy at the source level) as an intention to enhance intelligibility is a likely explanation of the vowel space shift.

References:

Son, R. van, Middag, C., & Demuynck, K. (2018). Vowel space as a tool to evaluate articulation problems. In Interspeech 2018. Hyderabad. Retrieved from https://www.isca-speech.org. Accessed: 27-Nov-2018.



SR Research Experiment Builder 2.2



Enhanced biometric device support, including:







Brain Products BrainVision Recorder

- Open / close experiment sessions
- Configure BrainVision Recorder workspace
- Start, stop, pause, and resume EEG recordings
- Send event markers (through TTL) to mark stimuli and response onsets
- Set recorder modes (Monitoring, Impedance, View Test Signal)
- Send annotations
- Check the state of BrainVision Recorder, application, and acquisition

EGI Net Station 2.0™

- Automatic online clock synchronization and clock drift correction
- Control opening / closing Net Station connections and recording sessions
- Start and stop recordings
- Access the eye data online and send event data online to the EEG systems
- Optionally send TTL signals during experiment runtime

Generic Biometric Device Synchronization

- Send event markers (through TTL) to mark stimuli and response onsets
- Easily configure TTL signal type and duration
- Start and stop recordings for some devices
- Support for USB2TTL8 Device

Experiment Builder 2.2 comes with detailed instructions and annotated example scripts for integrating your EyeLink system with EGI, BrainProducts, Neuroscan and BioSemi devices.

Please contact SR Research for further information about our eye-tracking solutions.

www.sr-research.com info@sr-research.com



 $\label{eq:EyeLink} \mbox{EyeLink is a registered trademark of SR Research Ltd.}$

SR Research Third-Party Integration

www.sr-research.com/third-party-integration

Third-party integration exists for these and many more:

Display Software	Presentation Monkey LogicINQUISIT OpenSesamePsychtoolboxLabVIEWE-PrímeMATLABPsychoPy	 E-Prime Inquisit LabVIEW MATLAB Monkey Logic OpenSesame PsychoPy Presentation Psychtoolbox
Programming Languages	Visual Basic C#/.NET c JAVA C++ 2 python	 C# / .NET, C, C++ JAVA Python Visual Basic
EEG , fNIRS, & GSR	BIOSEMI ant _{neuro} g.tec _{NIRX} NeuroScan [™] BRAIN PRODUCTS EGI	 AntNeuro Biosemi Brain Products EGI / Net Station / Philips g.tec Neuroscan NIRX
MRI & MEG	GE Healthcare CTF PHILIPS Elekta	 CTF Elekta GE Healthcare Philips Siemens
Other Software & Hardware	Noldus Observer b·kin Optotrak inputlog Translog Cedrus The MotionMonitor®	 BKIN Technologies Cedrus Eye & Pen Inputlog The MotionMonitor Noldus Observer Optotrak Translog

Please contact SR Research for further information about our eye-tracking solutions.





- + Books
- + Smart-App
- + Split-service
- + Free Tablet

Terms and conditions 2019: Free tablet with purchase of the package deal

The package consists of:

A minimum of 50 Quality Books, Smart-App, Split Service (for open access applications) and a free tablet, selected by Optima. This package deal is valid while stocks last. Package price from € 1,495.00 excluding VAT



Call or mail Optima for more information t: +31(0)10 - 220 11 49 • e: account@ogc.nl or visit our website: https://ogc.nl



Name:	
Email:	
Telephone number:	
Year of defence:	2019 2020 2021
Note:	

Pearl Buckplaats 37, Postbus 84115, 3009 CC Rotterdam t: (010) 220 11 49, e: account@ogc.nl, w: www.ogc.nl