CONFERENCE PROGRAM

JUNE 22-23, 2017
GRONINGEN
THE NETHERLANDS
Sponsors

Tabu Dag 2017, supported by:
Welcome to TABU Dag 2017!

Dear participant,

We are very happy to welcome you to the 38th TABU Dag conference at the University of Groningen, the Netherlands.

As every year, we have assembled a varied program of presentations which covers a broad area of linguistic research stretching from computational linguistics, to psycho-linguistics, and many more. Furthermore, with respect to previous years the format of the conference has been changed to be more interactive; we share the sincere hope that you will find this environment even more stimulating than before.

TABU Dag is an annual linguistics conference which attracts researchers from the Netherlands and the rest of the world, this year we count 14 countries. It is known for being welcoming to (post)graduate students as well as senior researchers. TABU Dag provides a meeting point for young researchers and leading scientists worldwide, allowing the former to discuss each other’s work, share ideas and get inspired by the story of the latter. We are pleased to welcome Professor Risto Näätänen, Professor Anna Papafragou, Professor Bart Geurts and drs. Ane van der Leij as the keynote speakers of this year’s conference.

In this booklet you can find all the information you need, to successfully get through this conference, including the program of the TABU Dag, relevant practical information, and the abstracts of our keynotes and other presenters.

We are grateful to our many sponsors and the Center for Language and Cognition Groningen for making this event possible.

We wish you a very enjoyable and productive conference!

The TABU Dag 2017 organizers:
Anna de Koster       Toivo Glatz       Stefanie Keulen
Rik van Noord        Isabel Eyer       Marco Dieterich
Martijn Wieling

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Phone 2: +31 6 17375891 – Rik van Noord
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Conference Venues

**Harmonie building**, Oude Kijk in ’t Jatstraat 26, 9712 EK Groningen

**Academy building**, Broerstraat 5 9712 CP Groningen
Plaza Danza, Boterdiep 20A, 9712 LN Groningen

Conference dinner and party with live music by Swinder and DJ Neon Wasabi!
Plaza Danza, Boterdiep 20A, 9712 LN Groningen

Conference dinner and party with live music by Swinder and DJ Neon Wasabi!

DIRECTIONS

A  Groningen Main Station
B  Harmony Building
   Oude Kijk in ‘t Jatstraat 26, 9712 EK Groningen
C  Academy Building
   Broerstraat 5, 9712 CP Groningen
D  Plaza Danza (Conference Dinner and Party)
   Boterdiep 20A, 9712 LN Groningen
**PROGRAM**

**Thursday 22.06.2017**

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<tr>
<td>08:00 - 17:00</td>
<td>Registration @ entrance Academy building – coffee available between 8 and 9 in Bruinszaal</td>
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<tr>
<td>08:55 - 09:00</td>
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| 09:00 - 10:00      | First keynote speaker – Prof. Risto Näätänen  
“The mismatch negativity (MMN) as a unique index of decreased brain plasticity in different cognitive brain disorders” | Offerhauszaal      |                               |
| 10:00 - 10:05      | Short Break                                                                             |                  |                               |
| 10:05 - 11:20      | Flash presentations                                                                      | Offerhauszaal      |                               |
| **Move to Harmony Building** |                                                                                      |                  |                               |
| 11:20 - 11:45      | Coffee break                                                                             | Weberfoyer        |                               |
| 11:30 - 13:00      | Poster Session 1                                                                         | Marie Lokezaal and Weberfoyer |                               |
| 12:45 - 14:00      | Lunch                                                                                   | Weberfoyer        |                               |
| **Move to Academy Building** |                                                                                      |                  |                               |
| 14:15 - 15:15      | Second keynote speaker – Prof. Anna Papafragou  
“Evidence and information in language and thought” | Offerhauszaal      |                               |
| 15:15 - 15:20      | Short Break                                                                             |                  |                               |
| 15:20 - 16:35      | Flash presentations                                                                      | Offerhauszaal      |                               |
| **Move to Harmony Building** |                                                                                      |                  |                               |
| 16:35 - 17:00      | Coffee break                                                                             | Weberfoyer        |                               |
| 17:00 - 18:30      | Poster Session 2                                                                         | Marie Lokezaal and Weberfoyer |                               |
| 18:00 - 18:30      | Drinks and poster prize award ceremony                                                   | Weberfoyer        |                               |
| 19:00 - 01:00      | Conference dinner and party  
Plaza Danza                                                                                   |                  |                               |
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<tr>
<th>Time</th>
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<tr>
<td>09:00 - 10:00</td>
<td>Third keynote speaker – Prof. Bart Geurts</td>
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<td></td>
<td>“Making sense of self talk”</td>
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<tr>
<td>10:00 - 10:30</td>
<td>Coffee break</td>
<td>Bruinszaal and Lounge</td>
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<tr>
<td>10:30 - 11:30</td>
<td>NWO Open Access Session by Drs. Ane van der Leij</td>
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<td>11:30 - 12:45</td>
<td>Flash presentations</td>
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<td><strong>Move to Harmony Building</strong></td>
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<tr>
<td>12:45 - 14:15</td>
<td>Lunch</td>
<td>Weberfoyer</td>
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<tr>
<td>13:30 - 15:00</td>
<td>Poster Session 3</td>
<td>Marie Lokezaal and Weberfoyer</td>
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<td><strong>Move to Academy Building</strong></td>
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<tr>
<td>15:15 - 16:15</td>
<td>Fourth keynote speaker – Willem (Jelle) Zuidema</td>
<td>Offerhauszaal</td>
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<td></td>
<td>“Neural Grammars: building models that take both the brain and language seriously”</td>
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<tr>
<td>16:15 - 16:30</td>
<td>Closing with poster prize award ceremony</td>
<td>Offerhauszaal</td>
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<tr>
<td>16:30 - 17:00</td>
<td>Drinks</td>
<td>Bruinszaal and Lounge</td>
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Friday 23.06.2017
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<tr>
<th>A1</th>
<th>Amélie la Roi</th>
<th>Idioms in the aging brain: The effects of age-related cognitive decline on the processing and comprehension of idioms</th>
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<tbody>
<tr>
<td>A2</td>
<td>Angelo Basile</td>
<td>Writing like the Holy Mary: a stylometric analysis of a christian apparitional phenomenon in Bosnia</td>
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<td>A3</td>
<td>Anne Merkuur</td>
<td>Productivity drives spreading: The case of Frisian past participles</td>
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<td>A4</td>
<td>Assunta Süß</td>
<td>Pupillometry and syntactic agreement: Sentence processing by German speakers</td>
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<tr>
<td>A5</td>
<td>Curt Anderson</td>
<td>The lexical semantics of role-denoting relational adjectives</td>
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<tr>
<td>A6</td>
<td>Denise Zijlstra</td>
<td>Iconicity and Phonological Processing in Sign Language Production</td>
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<tr>
<td>A7</td>
<td>Ellie van Setten</td>
<td>Reading and Spelling in Dutch and English as a Second Language in Adolescents with a Familial Risk of Dyslexia</td>
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<td>A8</td>
<td>Evelyn Bosma</td>
<td>Verbal working memory and the acquisition of cross-linguistic phonological regularities</td>
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<td>A9</td>
<td>Gert-Jan Schoenmakers</td>
<td>Across ‘yesterday’ or ‘not’: Adverb type in Dutch scrambling</td>
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<td>A10</td>
<td>H. van ‘t Hul</td>
<td>Evaluation of a corpus building tool for annotated multimodal instructions</td>
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<td>A11</td>
<td>Jelke Bloem</td>
<td>Verb cluster word order in Early-Modern Frisian</td>
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<td>A12</td>
<td>John Hoeks</td>
<td>Convincing Conversations: Can a Dialogue System Make you Vegan?</td>
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<td>A13</td>
<td>Julianna Feiden</td>
<td>Grammatical and conceptual pronoun number agreement processing in Brazilian Portuguese: An ERP study</td>
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<tr>
<td>A14</td>
<td>Karima Ben Abbes</td>
<td>The role of typological proximity in the acquisition of a third language (L3)</td>
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<td>A15</td>
<td>Karlien Franco</td>
<td>Excusing my French/Latin/German. Modelling geographical and semantic structure in the use of loanwords in dialectal varieties of Dutch</td>
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<tr>
<td>A16</td>
<td>Lasha Abzianidze</td>
<td>The Parallel Meaning Bank</td>
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<tr>
<td>A17</td>
<td>Maria Melissourgou</td>
<td>Understanding exam genres: a contrastive, corpus-based analysis</td>
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<td>A18</td>
<td>Martina Caccia</td>
<td>Music and language in children with Developmental Dyslexia: relationships between musical perception and the syntax-prosody interface</td>
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<tr>
<td>A19</td>
<td>Michelle Meier</td>
<td>The coordination of word initial consonant clusters in Georgian</td>
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<td>A20</td>
<td>Mieke Slim</td>
<td>Disjunction under Negation: A study with Dutch pre-schoolers</td>
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<tr>
<td>A21</td>
<td>Mugi Li</td>
<td>First things first: cross-linguistic analyses of event apprehension</td>
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<tr>
<td>A22</td>
<td>Nermina Cordalija</td>
<td>The Processing of Unaccusative Verbs: A Cross-Modal Lexical Priming Study</td>
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<td>A23</td>
<td>Nienke Meulman</td>
<td>Perception and production of constructions unique to L2: assessing grammatical proficiency using multiple measures</td>
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<tr>
<td>A24</td>
<td>Rafał Jończyk</td>
<td>Preparing for the worst may not be that bad in a second language mode: An ERP study on emotional anticipation in bilingualism.</td>
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<td>A25</td>
<td>Sandra Hansen-Morath</td>
<td>Analyzing the variation in verb number in contemporary German with regression analysis</td>
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<td>A26</td>
<td>Tamara Butigan</td>
<td>Trajectories in Analyses of Self-Translation</td>
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<td>A27</td>
<td>Zou Qin</td>
<td>The epistemic implicature in Mandarin A-not-A questions</td>
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<td><strong>Poster Session</strong></td>
<td>17:00 - 18:30</td>
<td>Marie Lokezaal</td>
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<td>B1 Aida Salcic</td>
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<td>B2 Alla Abrosimova</td>
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<td>B3 Anna Pot</td>
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<td>B4 Aviya Hacohen</td>
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<td>B5 Cong Feng</td>
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<td>B6 Daniela Palleschi</td>
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<td>B7 Dorothée Hoppe</td>
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<td>B8 Felicia Bisnath</td>
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<td>B10 Gabi Danon</td>
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<td>B11 Hamed Rahmani</td>
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<td>B12 Hasmik Jivanyan</td>
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<td>B13 Jie Fu</td>
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<td>B14 Julija Danu</td>
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<td>B16 Maria Melissourgou</td>
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<td>B17 Masha Medvedeva</td>
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<td>B18 Michaela Strinzel</td>
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<td>B19 Miguel Santin</td>
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<td>B20 Mirjam Günther- van der Meij</td>
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<td>B21 Nermina Cordalija</td>
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<td>B22 Pauline Veenstra</td>
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<td>B23 Sandra Hansen-Morath</td>
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<td>B24 Steven Gilbers</td>
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<td>B25 Theresa Redl</td>
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<td>B26 Ulrike Ackermann</td>
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**B1 Aida Salcic** Does distance between agreeing elements influence gender agreement processing in Dutch? An ERP study

**B2 Alla Abrosimova** Argument Structure in Deverbal Compounds

**B3 Anna Pot** Aging in an L2 context: A linguistic perspective on older migrants’ L2 use, health, and wellbeing

**B4 Aviya Hacohen** On the pragmatics of compositional (a)telicity: a psycholinguistic study

**B5 Cong Feng** Do you see when you read? Mental simulation of visual features during L1 and L2 reading comprehension

**B6 Daniela Palleschi** What’s in a Name?: Neural processing of temporal violations through extralinguistic time reference

**B7 Dorothée Hoppe** Before or After? Suffixes outperform prefixes in discrimination of complex L2 categories

**B8 Felicia Bisnath** A Diachronic Study of the Transparency of Sranan Tongo

**B9 Frea Waninge** Emotion and Motivation

**B10 Gabi Danon** Names, possession and modification in the Hebrew construct state

**B11 Hamed Rahmani** Persian ‘word stress’ is a syntax-driven tone

**B12 Hasmik Jivanyan** An account of syntactic and pragmatic differences in terms of unifying semantic features: The case of parce que/because and causal relations

**B13 Jie Fu** A Corpus Study on Metaphor Use in Aphasia

**B14 Julija Danu** Social language variation through the perception of modern Russian citizens


**B16 Maria Melissourgou** Changing trends in research articles: investigating informality.

**B17 Masha Medvedeva** Large-Scale Language Identification for Closely Related Languages

**B18 Michaela Strinzel** Acoustic Analysis of Vowel Articulation in Parkinson’s Disease with Mild Cognitive Impairment

**B19 Miguel Santin** Does the result justify the means? The representation of resultative events in Mandarin and Spanish.

**B20 Mirjam Günther- van der Meij** Does degree of bilingualism influence trilingual word recognition?

**B21 Nermina Cordalija** Phrasal or clausal conjunction? – postverbal conjoined subjects in Bosnian/ Croatian/ Serbian: an experimental study

**B22 Pauline Veenstra** Automatic Speech Recognition (ASR) efficacy for congenitally blind vs. sighted speech

**B23 Sandra Hansen-Morath** Identifying quality differences in low vowels in German with linear mixed models and logistic regression

**B24 Steven Gilbers** “It ain’t nuthin’ but a ‘G’ thang”: Rap flows as evidence for the connection between language and music

**B25 Theresa Redl** Gender inferences based on stereotypes and a generic masculine pronoun: Does Dutch zijn ‘his’ induce a male bias?

**B26 Ulrike Ackermann** Narrative Practices of (Self)Presentation: How Companies present themselves in Web Formats
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<td>C26 Veronika Vadinova</td>
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<td>C27 Victoriya Trubnikova</td>
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<td>C28 Vincent Boswijk</td>
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Risto Näätänen
Academy Professor em. of the Academy of Finland, Professor of Cognitive Neuroscience of the University of Tartu, and Visiting professor of the University of Aarhus

Prof. Näätänen is a pioneer in the field of cognitive neuroscience, and known worldwide as the discoverer of the electrophysiological mismatch negativity. He is an author of over 400 articles in peer-reviewed international journals, and currently there are more than 3000 articles in international refereed journals using, or referring to, the MMN or its magnetic equivalent. He is one of the few individuals appointed permanent Academy Professor of the Academy of Finland. He retired in 2007, retaining a title of Academy Professor emeritus of the Academy of Finland. Since 2007, he has been a professor at the University of Tartu.

The mismatch negativity (MMN) as a unique index of decreased brain plasticity in different cognitive brain disorders.

Brain plasticity in the auditory modality, the ability to form and maintain sensory memory traces for sounds, is a central prerequisite of auditory cognition. This plasticity can be measured by presenting a sequence of homogeneous sound stimuli interspersed by occasional deviant stimuli and recording the mismatch negativity (MMN) amplitude for these deviant stimuli. This amplitude is gradually decreased when the inter-stimulus interval is prolonged, indexing sensory-memory trace duration.

Brain plasticity determined in this manner is decreased as a function of aging and in particular in different cognitive brain disorders. In Alzheimer’s Disease, the duration of these memory traces is very short but they are accurately formed. In contrast, in patients with schizophrenia, these traces are not accurate even though their duration is normal.
Anna Papafragou received her B.A. in Linguistics from the University of Athens and her Ph.D. in Linguistics from University College London. She spent a year as a postdoctoral researcher at the University of California at Berkeley, followed by postdoctoral work at the University of Pennsylvania. Her field of research is the experimental study of language acquisition and processing. One aspect of her work concerns the relationship between linguistic and conceptual representations: how children acquire language, how language is used and understood online, and how language interfaces with human perceptual/conceptual systems. How is language related to thought? Does learning a language change the way you think? Do people who speak different languages think differently?

Evidence and information in language and thought

How do semantics and cognition make contact during language learning? This talk addresses this question by investigating the acquisition of evidentiality (the linguistic encoding of information source) and its relation to children’s evidential reasoning. I present data from a series of experimental studies with children learning Turkish and Korean (two languages with evidential morphology) and English (a language without grammaticalized evidentiality) in order to test two hypotheses: (a) the acquisition of evidentiality is complicated by the subtleness and abstractness of the underlying concepts; (b) learning a language which systematically (e.g., grammatically) marks evidential categories might affect early reasoning about sources of information. The experiments show that the production and comprehension of grammaticalized evidentials can pose considerable difficulty to young learners; these problems are in part conceptual in nature since the same learners make errors when reasoning about sources of information in non-linguistic tasks. Furthermore, children’s ability to reason about sources of information proceeds along similar lines in diverse language-learning populations and is not tied to
the acquisition of the linguistic markers of evidentiality in the exposure language. I discuss implications of these findings for the relationship between linguistic-semantic and conceptual representations during development.

Bart Geurts
Professor of Philosophy of Language and Logic, Radboud University Nijmegen

Bart Geurts studied philosophy in Nijmegen, obtained his PhD in linguistics from the University of Stuttgart, and was affiliated with IBM Germany, several universities in Germany and the Netherlands, and the Max Planck Institute for Psycholinguistics in Nijmegen, before returning to his alma mater in 1999, where he is now Professor in Philosophy of Language and Logic. His research interests centre on language and communication, and he has published on a wide range of topics in this field; but he has also been known to move into neighbouring areas, including language acquisition, human reasoning, and social psychology. He was managing editor and head of the advisory board of the Journal of Semantics, and a member of the advisory board of Semantics and Pragmatics. He is currently a member of the advisory board of Language Acquisition and Editor of Theoretical Linguistics.

Making sense of self talk

People talk not only to others but also to themselves. The self talk we engage in may be overt or covert, and is associated with a variety of higher cognitive functions, including reasoning, problem solving, planning, attention, and motivation. When talking to myself, I borrow linguistic devices from my mother tongue, originally designed for interpersonal communication, and employ them to communicate with myself. Wondering if it will rain tomorrow, I “ask myself” whether it will rain; I “tell myself” to do the dishes; I “remind myself” to lock the door when leaving my office; and so on. Asking, telling, and reminding are originally social acts, but when addressed not to others but oneself, they come to function as modes of thinking: wondering, making up one’s mind, motivating oneself, and so on. How is this possible?
To answer that question, we need a theory of communication that allows us to explain how the same linguistic devices can be used to communicate with others and oneself. According to the received view, language primarily serves to transfer information between people: communication is information exchange. There can hardly be any doubt that this is what language does, and that it is important. However, the received view fails to explain the continuity between social talk and self talk; for what could be the point of exchanging information with oneself? Hence, I propose that instead of focusing on information exchange, communication be viewed as a form of social interaction in which speakers negotiate commitments between them. On this account, the primary purpose of social talk is to make commitments to others, while self talk serves to make commitments to oneself.

Willem (Jelle) Zuidema
Assistant professor in Cognitive Science and Computational Linguistics, University of Amsterdam

Willem Zuidema studied Artificial Intelligence in Utrecht, and obtained a PhD in Linguistics at the University of Edinburgh. He worked as a researcher at the Sony Computer Science Laboratory in Paris, the Free University Brussels, Leiden University and as a VENI postdoctoral fellow at the Institute for Logic, Language and Computation at the University of Amsterdam. He is now assistant professor in cognitive science and computational linguistics at the same institute, and research fellow of the Language in Interaction project. He has published on techniques for wide-coverage syntactic and semantic parsing, the evolution of language and music, and deep learning models in cognitive science and natural language processing.

Neural Grammars: building models that take both the brain and language seriously

Recent years have seen much progress in the development of ‘deep learning’ models for Natural Language Processing. In my talk I will argue that variants of
these models have much to offer for those of us trying to understand how the human brain processes language. I will review work on both recursive and recurrent neural networks (with trainable ‘gates’), trained to perform tasks that require paying attention to the hierarchical semantic and syntactic structure of sentences. I will show that these models shed new light on the classic ‘binding problem’ in cognitive science, and how they may be evaluated against data from neuroimaging experiments.

**Drs. Ane van der Leij**

University Library

**Open access publishing – Policies and opportunities in the Netherlands and at the University of Groningen**

The Association of Universities in the Netherlands (VSNU) has negotiated several deals with major scientific publishers over the past two years, opening up subscription journals for publishing articles in Open Access. Researchers with a Dutch university affiliation can have their papers published Open Access for no extra charge in both subscription journals and open access journals. In 2014 such a deal was announced for a bundle of 1,500 paywalled journals from the publisher Springer followed by similar deals with other publishers in 2015, 2016 and 2017. The VSNU deals are reflecting the Dutch government’s policy on open access as it was launched in late 2013.

Also, during the same period, universities in the Netherlands announced their policies urging their researchers to deposit their articles in the institutional repositories, thus furthering open access via the so called ‘green road’.

In my presentation I will give a rough sketch of open access policies in the Netherlands, both on the national and the institutional level, and of the opportunities it brings to researchers to present their research to a wider audience. Also, I will give some short comments on the implementation of these policies.
ABSTRACTS SESSION 1

Idioms in the aging brain: The effects of age-related cognitive decline on the processing and comprehension of idioms

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University of Groningen

The process of aging involves a decline in the brain’s executive functions. Executive functions are responsible for complex cognitive processes, such as the ability to control and plan thoughts and behavior. Compared to younger adults, elderly adults’ performance on tasks that require executive functioning is impaired (e.g., Fisk & Sharp, 2004). However, the effects of age-related decline in executive functions on language are less clear. Therefore, this project examines the effect of age-related impairments in executive functioning on the processing and comprehension of language. This question is investigated in four studies using EEG and eye-tracking. The linguistic paradigm that is used to compare younger and elderly adults’ language processing abilities consists of idioms. Idioms, such as the Dutch tegen de lamp lopen (literally: ‘to walk against the lamp’, but figuratively: ‘to get caught’) are complex expressions whose figurative meaning cannot be derived from the literal meaning of the individual words. Instead, an idiom’s meaning is disambiguated by its context. Research suggests that the disambiguation of an idiom’s meaning draws on executive functions (Zempleni et al., 2007; Lauro et al., 2008). As executive functions decline with age, elderly adults’ idiom processing may be impaired. By using idioms as a linguistic paradigm, our project provides insight in how elderly adults process ambiguous language. In addition to examining elderly monolinguals, our project will investigate elderly bilinguals to see whether the cognitive advantages of lifelong bilingualism also interact with the ability to disambiguate idiomatic language. Finally, in collaboration with the Alzheimer Research Center Groningen, idiom processing and comprehension will be studied in patients with Alzheimer’s disease, whose executive functions decline rapidly. Overall, our project can lead to an increased understanding of the relation between general executive functions and language in old age. Moreover, the high temporal precision of
the research methods enables the potential use of our results as biomarkers of linguistic processing difficulties due to aging.

References


Writing like the Holy Mary: a stylometric analysis of a Christian apparitional phenomenon in Bosnia

Angelo Basile

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In 1981 the village of Medjugorje in Bosnia became the site of continuous marian apparitions. The story follows the modern apparitional patterns that are common in many ex-communist countries: for those who believe it, the Holy Mary appears to six Herzegovian children and delivers them generic messages about the peace in the world. What makes this case different from similar other is its duration: the apparitions are still on-going since 1981, with varying time schedules. The story becomes interesting from a linguistic perspective because all the messages are being transcribed and published on the web: since the apparitions to some extent consist of the transcribed messages, we can say that this growing corpus represents the whole phenomenon. This corpus is the object of the present work. The corpus was built by scraping the website medjugorje.ws which collects all the messages. We focused on the authorship of the messages. First, we grouped the messages by receiver. We wanted to investigate if there are any significant differences in the style of the messages delivered to different receivers. Assuming no difference in style between the groups, if we find a difference, then we can say that either (i) the source changes its style depending on the receiver or (ii) the receivers contribute to the message. We consider the first hypothesis to be odd, therefore we will consider the second one as the only alternative hypothesis to the null one. To summarise: given a set of documents labelled by receiver, we want to know if there are substantial unexpected differences in these documents. We approached the problem in two ways: within a traditional null hypothesis-testing framework and from a predictive perspective. Initial results from both approaches are positive: in the data there is enough signal to distinguish messages delivered to one receiver from those delivered to another one.
Productivity drives spreading: The case of Frisian past participles

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Our study shows that the Tolerance Principle (Yang, 2005; 2016) makes the correct predictions as to the productivity and spreading of morphological variants in Frisian. In Frisian, there are two alternative types of past participles which both have their origin in the South-western dialect region of Fryslân (Hof, 1933; Boelens & Van der Woude, 1955; Fryske Akademy Language Databases, 2009; Tiersma, 1999: 63–64), but of which only one appears to be spreading productively across the whole language area (Goeman, Taeldeman & van Reenen, 1980; Van der Veen, 1980). The first alternative involves a subclass of weak verbs, the second one involves a subclass of strong and irregular verbs. Frisian has two classes of regular verbs (class I with an infinitive ending in -ə, class II with an infinitive ending in -ja), and quite a range of strong and irregular verbs. Past participles of weak class I verbs are marked with the weak suffix -t or -d, as in (1) (norm). Alternatively, participles of this kind with a stem already ending in -t or -d are often extended with the suffix common for strong verbs: -an (alternative):

(1) norm alternative
prate praat-t > praat prat-en
[prat] [prat] [pratan]
talk-INF talk.PTCP talk.PTCP

Vice versa, monosyllabic past participles of strong verbs, which normally end in -(ə)n, sometimes get extended with the weak class I suffix -t or -d, as shown in (2):

(2) norm alternative
sjen sjoen sjoen-d
[jen] [ju.an] [ju.an-t]
see-INF see.PTCP see.PTCP
We will argue that the difference in spreading between these two alternative forms is due to the present-day productivity of their underlying rules. Specifically, our study shows that the Tolerance Principle (Yang, 2005, 2016) predicts this difference in productivity correctly and we will therefore conclude that rule-productivity as defined by Yang (2005; 2016) is a key factor in determining spreading patterns in situations of contact.

References
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Pupillometry and syntactic agreement: Sentence processing by German speakers

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In this study, we tested whether pupillometry is a suitable tool to study processing of subject-verb agreement in German healthy adults. Previous research has shown that the pupil dilates not only because of changes in illumination or emotions like fear, but also relates to higher cognitive processing like working memory load (Kahneman & Beatty, 1966). Pupillometry has been used to investigate the processing of various linguistic phenomena (Schluroff, 1982; Just & Carpenter 1993, Engelhardt et al, 2010, Fritzsche & Höhle, 2015).

The aim of the current study was to use pupillometry to investigate adults processing of syntactic agreement between subject and verb in a sentence. Certain syntactic information – so called features of the subject, like person and number – are expressed on the finite verb, like the -s in “she works”. Our hypothesis was, that the processing of subject-verb agreement would be reflected in participants’ pupil sizes, with increase in the case of an agreement violation.

Method

Pupillometry was conducted as a single-picture eye-tracking experiment, where participants were seated in front of a screen, presenting a picture of some action. A related sentence including either congruent subject-verb agreement or a violation of subject-verb-agreement with respect to number features was given via audio speakers. For each participant, 40 sentences were presented, half of which were ungrammatical, with no fillers in between. During this procedure, participants’ pupils were tracked via an eye-tracker. The data was then baselined, collapsed over participants and analyzed using R and linear mixed models.

Results

The results revealed that pupil dilation correlates with the congruency of the agreement in the sentences. Given violated agreement, after verb offset pupil dilation went on longer, resulting in a larger pupil diameter. We propose that the higher
increase of pupil dilation after agreement violations in our experiment reflects the higher effort that is needed to process these syntactic violations.

References


The lexical semantics of role-denoting relational adjectives

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I examine the lexical semantics of role-denoting relational adjectives (RAs) such as *presidential*. Adjectives of this type have the implication that the referent of the nominal they modify has a relation to the official duties associated with a role. A clear example is with modification of an event nominal, such as *presidential visit*. The use of the RA implicates that the visit is an official duty of the president. This relation does not obtain when the agent is represented as a possessor (compare (1a) and (1b)), or with a verbal predication (see (2)). Other pairs of examples, such as *presidential/president’s advisor/desk*, show a similar contrast.

(1) a. the president’s visit (to his mother)
   b. a presidential visit (#to the president’s mother)

(2) The president visited his mother. There was a presidential visit to the president’s mother.

I decompose *presidential* as referring to an event of leading an institution, where a president is the agent of this event. This event has as subparts the events that originate from the responsibilities and duties of leading an institution. Modified nominals relate to this event or to its event participants in different ways, based on the lexical semantics of the nominal.

Our analysis differs from kind-based analyses of RAs (McNally & Boleda, 2004; Arsenijevic et al., 2014) in making role-denoting RAs event-related. Decomposing the lexical semantics allows us to be explicit about how the meaning of the modified nominal interacts with components of the adjective meaning. Analyses that expose the lexical semantics of modifiers and modifiees capture fine-grained meanings found with RAs and how they interface with world knowledge, showing that lexical information is vital to understanding attributions with RAs. Our results are discussed in the context of a decompositional theory of lexical meaning that
allows for subcompositional processes. Finally, although we focus on presidential, we argue that our results are generalizable to other role-adjectives.
Iconicity and Phonological Processing in Sign Language Production

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Signed languages exhibit a substantial degree of iconicity, which refers to a transparent relationship between form and meaning. This means that signs often resemble entities in the real world. The impact of iconicity on sign language processing is still unclear. Some studies with (deaf) proficient signers have found no effect of iconicity, while other studies have found facilitatory or inhibitory effects. The aim of the current study is to look more closely at the role of iconicity in lexical access by investigating the interaction between iconicity and phonological processing in hearing native users of Sign Language of the Netherlands (NGT). Eleven hearing signers born into a family with one or two deaf signing parents completed a primed forward translation task, in which they saw a video of an NGT sign (prime) followed by a written Dutch word, to be translated into NGT (target). The task consisted of 100 critical items and 50 fillers. The critical items were equally divided over four conditions that varied in the relationship of the NGT prime to the NGT translation of the Dutch target that was always iconic:

1. phonologically related iconic prime
2. phonologically related non-iconic prime
3. phonologically unrelated iconic prime
4. phonologically unrelated non-iconic prime

Additionally, participants performed several proficiency tasks. Data analysis is still ongoing, but preliminary results suggest facilitatory effects of iconic primes as well as phonologically related primes on reaction times in the translation task.
Reading and Spelling in Dutch and English as a Second Language in Adolescents with a Familial Risk of Dyslexia

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Purpose

English has a lower orthographic transparency than Dutch, which makes reading in English more difficult for beginning readers. In this study we investigated how Dutch adolescents with (a familial risk of) dyslexia read and spell in Dutch and English as a Second Language (ESL). Important questions are whether dyslexia affects Dutch and ESL similarly, and how the group with a familial risk without dyslexia (FRND) performs relative to non-risk controls, as some previous studies have found mild deficits in the FRND group as well (van Bergen, van der Leij, & de Jong, 2014).

Method

Eighty-one adolescents (mean age = 14;1 years;months, SD = 7 months, 39 male) were included. There were 50 adolescents with a familial risk; they had a parent with dyslexia. Twenty-five participants with a familial risk were diagnosed with dyslexia. The control group consisted of 27 participants without a familial risk and without reading problems. In a MANOVA groups were compared on Dutch word, pseudo-word and loan-word reading fluency, English word reading fluency, and Dutch and English vocabulary and spelling. In a repeated measures ANOVA English and Dutch tasks were compared.

Results and Conclusion

Adolescents with dyslexia performed significantly worse than the control group on all tests. Effects were large for reading and spelling in Dutch and English. The FRND scored lower than the control group but this difference was only significant for Dutch pseudo-word reading. This pattern is in line with a polygenetic inheritance and multifactorial origin of dyslexia. Effects were similar for English and Dutch, except for word-reading where the dyslexic group performed unexpectedly relatively
well on English. Thus the lower orthographic transparency did not lead to larger deficits in English.

References
Verbal working memory and the acquisition of cross-linguistic phonological regularities

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Closely related languages such as Frisian and Dutch share cross-linguistic phonological regularities, which connect a fixed sequence of phonemes in one language to another fixed sequence of phonemes in the other language. An example is Frisian -âld [ɔ:t] and Dutch -oud [ɔut], as in the cognate pairs kâld [kɔ:t] – koud [kɔut] ‘cold’ and wâld [wɔ:t] – woud [wɔut] ‘forest’. It is thought that bilingual speakers make use of these regularities to relate the vocabulary of one language to the other and to quickly switch between languages (Rys, 2009; Sjölin, 1976; Taeldeman, 2013). However, as far as we know, there is no psycholinguistic evidence for this claim. Recent research, though, suggests that cross-linguistic phonological regularities do have a mental reality, as children seem to start using them as they grow older (Bosma et al., 2016). Within Bybee’s usage-based network model (1995, 2001, 2008, 2010), applied to a bilingual context, phonological regularities across languages are similar to grammatical rules within a language, as they are both generalizations that arise from schemas of phonologically and semantically related words. As the acquisition of grammar is related to verbal working memory (Engel de Abreu & Gathercole, 2012; Verhagen & Leseman, 2016), we investigated whether the acquisition of cognates with a cross-linguistic phonological regularity is also related to verbal working memory. For three consecutive years, five- to eight-year-old Frisian-Dutch bilingual children (n = 120) were tested annually on verbal working memory and a Frisian receptive vocabulary task that comprised four cognate categories: (1) identical cognates, (2) non-identical cognates that either do or (3) do not exhibit a simple phonological regularity between Frisian and Dutch, and (4) non-cognates. Non-verbal IQ, SES, verbal short-term memory and exposure to Frisian were included as control variables. The results showed that verbal working memory had a significantly stronger effect on cognate category (2) than on the other three cognate categories. This suggests that verbal working memory supports the acquisition of cross-linguistic phonological regularities.
Across ‘yesterday’ or ‘not’: Adverb type in Dutch scrambling

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Direct object scrambling is a type of word order variation in which the direct object of a sentence moves to a more leftward position in the sentence, illustrated for Dutch in sentences (1) and (2).

(1) Patrick heeft onlangs de cursus afgerond. UNSCRAMBLED
(2) Patrick heeft de cursus onlangs afgerond. SCRAMBLED

‘Patrick has recently completed the course.’

While the permissibility and optionality of scrambling have recurrently been discussed in detail in the linguistic literature, it was always with a heavy focus on features of the direct object (e.g. definiteness and anaphoricity: van Bergen & de Swart, 2009; 2010; Bouma & de Hoop, 2008; Neeleman & Reinhart, 1998). It has been suggested that properties of the adverb may also play a role in scrambling (Broekhuis, & Corver, 2016; Verhagen, 1986), but to date there have been no in-depth investigations of their influence.

In an experimental study, consisting of a comprehension and a production task featuring the factor ADVERB TYPE, the nature of the adverb revealed to be co-determinant in word ordering strategies: Dutch natives scrambled only 38% of the direct objects across temporal adverbs, but as much as 91% across the negation adverb.

Another key finding from earlier research that we replicated is that there seems to exist an asymmetry between language production and comprehension: native speakers happily accept the scrambled as much as the unscrambled word order in sentences with a temporal adverb, and all sentences with the negation adverb were rated as decent at least. It thus seems that speakers are underusing a word order option that the grammar makes available to them.
We aim to further investigate whether the discrepancy due to adverb type can be attributed to a threshold in syntactic positioning (Broekhuis & Corver, 2016) or whether semantic constraints come into play (Bonami et al., 2004).

References


Evaluation of a corpus building tool for annotated multimodal instructions

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We present an evaluation study of the PAT workbench, an online corpus tool developed to store, annotate and retrieve multimodal instructions (MIs) that include text and pictures. To find out whether the PAT workbench meets its goals and to assess the usability of the system, a two-step formative evaluation was conducted that included an expert review and a user evaluation.

The expert described the system and conducted a heuristic inspection and a cognitive walkthrough w.r.t. PAT’s top tasks (addition, search and annotation of MIs). Results showed that, given the three top tasks, the two most severe usability problems were ‘visibility of system status’ (e.g. lack of feedback to the user, available information and functions were not clear) and ‘consistency and web standards’ (e.g. clickable links styled as text, site behaved not as expected). Accordingly, the PAT workbench was improved.

The user evaluation consisted of two tests with ten students enrolled in the master course on multimodal instructions in Communication and Information Science at Groningen. The first test was conducted at the beginning of the course when students were unfamiliar with the system. The second test was conducted after the students had worked with the system for seven weeks. In both tests participants were asked to perform the three top tasks while thinking aloud. Participants filled out a questionnaire after each task and two general usability questionnaires after performing all tasks. The tests were concluded with an interview with the participants. Results of the first test show that participants were able to upload and search MIs. However, participants experienced problems in the annotation task, with finding the annotation page as well as with saving and viewing their annotations. The PAT Workbench was improved before the second test was conducted. Results of the second test are still being processed.
Verb cluster word order in Early-Modern Frisian

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Verb clusters display a lot of word order variation in the West Germanic languages. In Dutch, when one has two verbs in a cluster (an auxiliary and a main verb) both logical orders are possible. The word order preference in standard Dutch has been shifting from auxiliary-final verb clusters to auxiliary-first clusters since around the year 1500, allowing the use of both orders. In West-Frisian, such a shift has also been observed, but it appears to be much more recent, and influenced by language contact with Dutch.

However, in older Middle Frisian texts, written before the order preferences in Dutch started shifting, the ‘ungrammatical’ auxiliary-first order also appears (e.g. the Elder Skeltenariucht from around the year 1300, where it is used about 10% of the time) This raises a question: is the modern use of this word order really a new development taken from Dutch, or rather a continuation or resumption of an older language-internal development? To study this, we have extracted verb clusters from a corpus of Early-Modern Frisian texts, including both poetry and prose by the same author.

Preliminary results show that auxiliary-first clusters are much more frequent in poetry. Furthermore, we found no effect of clause length or morphological complexity, unlike in modern Dutch, where the auxiliary-first order is used in complex contexts in order to facilitate processing. Given these two results, it seems more plausible that the auxiliary-first order is mainly a stylistic device used by these authors in the written modality, rather than a construction with the function of decreasing language processing load as in Dutch. Therefore, we will conclude that these auxiliary-first word orders used in Early-Modern Frisian texts may have come from Dutch, but do not have the same function.
Convincing Conversations: Can a Dialogue System Make you Vegan?

John Hoeks, Emma Zaal

*University of Groningen*

**Introduction**

Most of us are unaware of the large, negative impact that animal agriculture has on our world: It uses up land and drinking water, causes deforestation and extensive greenhouse gas emission, decreases biodiversity, and causes animal suffering on an industrial scale. The most obvious and also healthiest solution to these problems is to adopt a plant-based – vegan – lifestyle. We tested the effectiveness of a computer-based dialogue system in persuading people to move towards a plant-based lifestyle.

**Theoretical background**

Motivational Interviewing (MI) is a persuasive technique aiming to inspire conversational partners to think about their own motivation towards behavior change (Miller & Rollnick, 2002). But a persuader must also put forward strong arguments and dispel weak and invalid ones (e.g., “lions eat zebras too”). As previous research suggests that women are more sensitive to changing their eating habits than men (Cooney, 2014), we added Sex of the participant as a predictor variable.

**Methods**

Participants (N=491) were randomly assigned to one of four on-line versions of the dialogue system:
1) Argumentation plus MI with explicit permission;
2) ARG plus MI without explicit permission;
3) ARG only;
4) Control (no MI or ARG).
Results
Univariate ANOVA on data from completed questionnaires (N=280) revealed a marginally significant interaction of Condition (4) and Sex (2) on intention to adopt a (more) plant-based diet (F(3,272)=2.2; p=.088). Condition turned out to be significant only for men (p<.05; Control condition and ARG only had lowest scores; MI conditions did not differ), not for women (p>.80).

Conclusions
Our dialogue system did appear to have a (modest) persuasive effect, but this effect was greater in men than in women. Also unexpected was the finding that argumentation was no significantly more convincing than control. Motivation thus prevails over argumentation.

References
Grammatical and conceptual pronoun number agreement processing in Brazilian Portuguese: An ERP study

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Number agreement depends mainly on two kinds of information: morphosyntactic/grammatical and semantic/conceptual (Bock, Eberhard, & Cutting, 2001; Eberhard, Cutting, & Bock, 2005). For most nouns, morphosyntactic and conceptual numbers coincide (Schweppe, 2013; e.g., the boySG – one boy and the boysPL – more than one boy). However, for collective nouns, syntactic and conceptual number do not match (e.g., the bandSG – a group of musicians). When nouns with conceptual number are involved in co-reference establishing, the pronoun agrees with the noun’s conceptual number, thus creating an agreement mismatch in grammatical number (e.g. the bandSG played last night. TheyPL were great).

Previous studies have shown conflicting data regarding conceptual number. In English, conceptual anaphors were considered more natural than grammatical anaphors (Gernsbacher, 1991). In German, however, the pronoun interpretation relied on the distance between the antecedent and its anaphor (Schweppe, 2013). We aim to disentangle this issue by using Even Related Potentials, since they are differentially sensitive to syntactic and semantic information.

Our study investigates the role of conceptual number in co-reference establishing, as well as the processes and ERP components that are elicited by noun-pronoun number violations while manipulating the number type (grammatical vs. conceptual). Our hypothesis is that conceptual number agreement entails more levels of processing (both grammatical and conceptual) compared to grammatical number processing (only grammatical information), and is thus more complex to process. The increase in processing is expected to be reflected in a larger P600 effect. Therefore, we predict that sentences containing a conceptual number violation (collective noun – singular + personal pronoun – singular) will elicit a larger P600 effect, when compared to sentences that present a grammatical number violation (collective noun – singular + personal pronoun – plural).
We are currently conducting a word-by-word reading task among thirty native speakers of Brazilian Portuguese. The results will be discussed in the presentation.

References


The role of typological proximity in the acquisition of a third language (L3): The property-based structural proximity (PSP) hypothesis

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Most L3 acquisition studies have been carried out to answer one common question: which of the previously acquired languages (L1/L2) is the source of cross-linguistic influence (hereafter CLI) in L3A? Several competing hypotheses, in the domain of morpho-syntax, have been proposed. The L1 Factor hypothesis (Hermas, 2014) states that L1 is the source of CLI in L3A, while the L2 Status factor (Bardel and Falk, 2007) argues that L2 is the most predominant source of influence. Yet, others claim that, irrespective of order of acquisition, typological proximity between the L3 and the L1/L2 is the deterministic factor, and therefore, the language that is typologically the closest to the L3 is the source of CLI (the Typological Primacy Model (TPM), Rothman, 2011, 2015).

Using a mixed method approach consisting of quantitative experimental tasks and one qualitative instrument (a semi-closed questionnaire), this study aims to contribute to this debate by investigating, within a generative perspective, the acquisition of three morphosyntactic properties (Gender, Number Concord and Definiteness) in early L3 French interlanguage by L1 Spanish and L1 Turkish natives who had learnt English as an L2.

Results showed strong support for typological proximity as a deterministic factor. However, contra the TPM which states that typological proximity is always perceived on a holistic basis, the present work found evidence for structural proximity that is perceived on a property-by-property basis. In light of such results, this study proposed a new hypothesis entitled the property-based structural proximity (the PSP) which states that in the absence of any background language that is typologically similar to the L3 on a holistic basis, structural proximity on a property-by-property level is the key deterministic factor for CLI in L3A.
References


Excusing my French/Latin/German. Modelling geographical and semantic structure in the use of loanwords in dialectal varieties of Dutch

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Many words in the dialects of Dutch have their origin in a different language. For example, the French noun ‘caban’ is often used to refer to a WARM COAT; the Latin word ‘crucifix’ for a CRUCIFIX (‘kruisbeeld’ in Dutch) and the German word ‘frech’ for INSOLENT. In this paper we use inferential statistical techniques to investigate whether we can find semantic and geographical differences in the frequency of use of loanwords in dialects. We expect that the language that is used the most differs per semantic field and that the number of borrowings from a particular source language varies across the dialect areas under investigation.

Using Generalized Additive Modelling, we analyze the geographical and semantic structure of loanword usage in four semantic fields of the digitized databases of the dictionaries of the Brabantic and Limburgish dialects (WBD and WLD), viz. clothing and personal hygiene; personality and feelings; society, school and education; church and religion. On the one hand, we find that the geographical distribution of loanwords differs per source language. French is used more in Flanders, while Latin occurs throughout the area of the Brabantic and Limburgish dialects. German is predominantly used close to the border between Limburg and Germany. On the other hand, we show that the French and Latin loanwords are significantly more frequent in the fields of clothing and personal hygiene, and church and religion, respectively. Overall, the interaction between the geographical and semantic structure in the use of the loanwords confirms that borrowed lexemes reflect the structure of society throughout history to a large extent (e.g. Van der Sijs 2005: 23). We find both traces of language contact with more prestigious varieties (viz. French and Latin) and of the influence of geographical proximity (for the German loanwords) in lexical dialect data.

References

The Parallel Meaning Bank

Lasha Abzianidze, Johannes Bjerva, Kilian Evang, Hessel Haagsma, Rik van Noord, Pierre Ludmann, Duc-Duy Nguyen and Johan Bos

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We present the latest developments in constructing the Parallel Meaning Bank: a freely accessible parallel corpus annotated with shared meanings for four different languages (http://pmb.let.rug.nl). The corpus contains a total of over 11 million words (45% English, 34% German, 12% Italian, 9% Dutch) divided into ca. 285 thousand documents.

Each document comes with at least 2 translations where one of them is always in English. The documents contain bitexts from corpora such as Europarl, Sherlock Holmes, the Bible, News Commentary, Tatoeba, TED and RTE.

Our approach is based on cross-lingual projection: meaning representations for English sentences are projected onto their word-aligned translations in Dutch, German and Italian. The starting point for this is the existing technology to automatically produce semantic analyses of reasonable quality for English. We then correct these annotations if necessary, and assuming that the translations are meaning-preserving, we project the annotations from the English analyses to the other languages.

The automatic semantic annotation consists of five main steps:
(i) segmentation of texts into sentences and tokens (using a statistical tokenizer),
(ii) semantic tagging (abstracting over part-of-speech tags and named entity classes),
(iii) symbolization (combining lemmatization and normalization),
(iv) syntactic parsing (with Combinatory Categorial Grammar), and
(v) composition of formal meaning representations (based on Discourse Representation Theory).

These steps are mostly performed by tools using statistical models trained in a supervised manner. The used annotation models are all language-neutral. The meaning representations are obtained compositionally from syntactic derivations. The compositional approach to semantics facilitates cross-lingual projection by reducing it to annotation projection on word-level. Despite this, projecting the
annotations from English to the other three languages is challenging both from a theoretical and practical point of view. We will show what these challenges are and what we have achieved so far.
Understanding exam genres: a contrastive, corpus-based analysis

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English language proficiency exams involve a great deal of people and high-stakes decisions are often based on these results. Foreign language learners apart from the obvious struggle to understand how a new language works face the extra difficulty of knowing how to use it appropriately in specific contexts. Paltridge (2001: 7), considers generic competence as the combination of linguistic competence, that is, the mastery of the language code, and communicative competence based on pragmatic knowledge.

In order to raise genre awareness, this study aims to provide a description of individual exam genres and demystify text property terms. It also aims to offer insight as to the relations between pairs of genres.

Using a pedagogical genre-based corpus eight genres/sub-corpora are analysed quantitatively based on sixteen features. These are selected features from grammatical categories (e.g. pronouns, modals), derivative statistics (e.g. lexical density, Standardised Type/token ratios) and statistics related to text structure (e.g. mean word length, words per sentence). Based on associations made in the literature and my previous research the features are then linked to specific text properties (e.g. Objectivity and formality, Involvement, Syntactic complexity).

The results reveal some interesting points of convergence and divergence between pairs of genres. Assumptions on the similarity among texts which belong to the same text type category such as ‘Essays’ or ‘Letters’ in this context can be wrong and may mislead novice writers. Classification of texts based on text type seems too broad. Therefore, the author encourages a genre-based classification of texts in ELT (English Language Teaching) material.

References
Music and language in children with Developmental Dyslexia: relationships between musical perception and the syntax-prosody interface

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Rationale
There are several hypotheses for the origin of dyslexia but many researchers now converge on the idea that several causes and factors (sometimes mutually related, sometimes only co-occurring) concur to the emergence of reading disorders (multi-factor models) (Pennington 2006). Among these factors, deficits in auditory processing of incoming stimuli deserve special attention because their influence is exerted at very early stages of language development (Tallal 1980; Ramus & Szenkovits 2008 etc.).

Methods
17 typically developing (TD) children and 15 children with developmental dyslexia (DD), aged 10–14 years, Italian native speakers, took part in the experiment. They were administered two experimental tasks: picture matching (PM) and auditory sequence discrimination (AD), and a standardized test battery to evaluate their cognitive, phonological and morphosyntactic abilities. In the PM task they had to listen to a recorded sentence and choose among three pictures (target response, alternative interpretation and a distractor). Each sentence had an ambiguous syntactic structure which was disambiguated through prosody. In the AD task, they should discriminate between two sequences of three instrumental tones with different accent patterns.

Results
Results from the PM task were separately analysed according to Response (target, alternative or distracter) considering: a) Type of linguistic structure, b) Distance in syntactic dependencies and c) Grammatical Function Assignment (GFA), comparing the two Groups (DD vs TD). A multivariate ANOVA showed that there were
no differences in response accuracy of the two groups but there were different response patterns for the different types of sentences.

As to AD, a significant difference emerged in response accuracy between the two groups. Moreover, a significant positive correlation emerged between AD and phonological standardized tests, and between PM and AD response times.

References


The coordination of word initial consonant clusters in Georgian

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Georgian, a Kartvelian language, spoken in the South Caucasus, is known for exhibiting large initial consonant clusters of up to seven consonants (e.g. /gvpʦkvni/ ‘you(pl.)-peel-us’). Not so much is known about whether and how these consonant clusters are structured into one or more syllables.

In the framework of Articulatory Phonology [1] it is assumed that the coordination of articulatory gestures reflects certain syllable structures, e.g. simple and complex syllable onsets. Based on articulatory measurements of timing relations between consonantal gestures, clusters are assumed to be either branching/complex (timing pattern in the cluster is compressed when consonants are added from #CV to #CCV) or simple onsets (the added consonant fills its own time slot leaving the timing pattern of the other consonants unchanged).

While e.g. Tashlhiyt [3,4] and Moroccan Arabic [5,6] allow for simple onsets only, Georgian seems to exhibit consonant clusters with complex onsets [2,3]. However, the only study performed [3] relied on two speakers only and one set of target words. The current study aims to increase the number and complexity of the consonant clusters.

We recorded articulatory data from 4 native Georgian speakers (3 female, 1 male) using electromagnetic articulography (AG 501). 24 Georgian target words forming 6 cluster sets were embedded in a carrier phrase (/gamotkvi __ samʤer/ ‘say __ three times’) and repeated 7 times (in total 1008 tokens). We compared word sets consisting of consonant clusters like CV, CCV and CCCV (as in /deb/ ‘you(sg.)-lay’, /vdeb/ ‘I-lay’, /gdeb/ ‘I-lay-you(sg.)’, /gvdeb/ ‘you(pl.)-lay-us’) or CCV, CCCV and CCCCV (as in /dgam/ ‘you(sg.)-put’, /vdgam/ ‘I-put’, /gdgam/ ‘I-put-you(sg.)’, /gvdgam/ ‘you(pl.)-put-us’).

Contrary to the claim that Georgian exhibits a complex onset coordination, preliminary results point to a more simple onset coordination. We will present our results and possible implications for the syllabification of Georgian consonant clusters at the TABUDag conference.
References


Disjunction under Negation: A study with Dutch pre-schoolers

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This study investigates Dutch pre-schoolers’ interpretation of two types of sentences containing a negated disjunction, sentences with ‘geen’ (no): Het dier heeft geen paprika of wortel gegeten (‘The animal didn’t eat carrot or pepper’) or with ‘niet’ (not): Het dier houdt niet van paprika of wortel (‘The animal doesn’t like pepper or carrot’).

These sentences are scopally ambiguous, but the preferred interpretation varies cross-linguistically. This interpretation can be ‘conjunctive’ (the animal didn’t eat the carrot NOR the bell pepper), as in English, or ‘disjunctive’ (the animal didn’t eat the carrot OR the bell pepper, but it’s uncertain which), as in Hungarian. This difference is due to the polarity of the disjunction. A positive polar disjunction results in the disjunctive reading, whereas a conjunctive reading is preferred if the disjunction is not a positive polarity item (PPI) (Szabolcs, 2002).

Children, regardless of their target language, all seem to favour the conjunctive reading (e.g. Russian: Verbuk, 2007; Turkish and German: Geçkin, 2015; Japanese: Goro & Akiba, 2004; Minai, Goro & Crain, 2004). The Semantic Subset Principle (SSP), that states that learners initially the strong reading of semantically ambiguous sentences, explains this pattern (Crain, Conway and Ni, 1994).

In the experiment, 40 children and 23 adults judged sentences with negated disjunction under negation in two situations:

1. The animal ate one of the two vegetables
2. The animal ate neither vegetable

As disjunction is not a PPI in Dutch and given the predictions of the SSP, we expected both children and adults to prefer the conjunctive interpretation. Our results support this prediction, with exception of the responses of the young four-year-olds that participated in the niet-version. They accepted the test sentences in the first situation to some extent (25%), in contrast to the adults. We are presently
collecting more data from this age group to see if this effect holds up. In addition, we test this group on a novel task with sentences that combine ‘niet’ and ‘of’ in a simpler structure (Het ei is niet rood of blauw ‘the egg is not red or blue’).
Apprehension is the rapid process during which we extract the ‘gist’ of a visual stimulus. People can retrieve information on an event’s category, structure and roles in as little as 20–400ms (Dobel et al., 2007; Hafri et al., 2013; Castelhano & Henderson, 2007), when dealing with real-world event photographs. It is, however, difficult to isolate these initial visual processing stages from later processing, in particular when using verbal output as the only measure.

We investigate to what extent apprehension is guided by top-down factors, i.e., the task demands (nonverbal task, agent/action naming, event description) and the language background of the viewer, by analysing first fixations on event stimuli with only 300ms exposure time. Under the brevity of exposure and increased cognitive load, people may resort to automatized visual processing routines that have been shown to be influenced by language-specific description patterns (Trueswell & Papafragou, 2010; Gerwien & Flecken, 2016).

We compared Dutch and Chinese (N=24 participants in each group), hypothesized to differ in the degree of agent-orientedness in causative event (agent engaged in action on object, e.g., woman opening a can) encoding: Chinese a) allows topic-drop (sentences with null subjects/agents), b) does not mark gender/number in nouns, c) marks grammatical aspect (perfective LE, progressive ZAI), d) uses resultative verb compounds encoding action-results (e.g., to cut-become two pieces). These features should lead to general lower agent-saliency, compared to event encoding in Dutch.

We adopted a novel eye-tracking paradigm in which participants were exposed to photographs of causative actions for 300ms only. Participants performed three pseudo-randomized tasks across blocks:
1) nonverbal task: respond to pictures repeatedly appeared;
2) agent or action identification: recognize the actor or name the action (e.g., cutting paper);
3) event description: producing a full sentence describing the event in the picture.

We analyze the location of the very first fixation (on agent or action) in isolation.

We hypothesize an interaction between language background and task demands (data collection is currently underway): cross-linguistic differences in first fixations are not expected during agent/action identification. However, in event description, Chinese participants should be more likely to first fixate on the action/object, whereas Dutch speakers are more likely to fixate the agent as starting point for visual-linguistic processing (cf. Gerwien & Flecken, 2016, for German). An open question is, to what extent language-specific processing patterns are reflected in the nonverbal task.

We present our results and discuss them in the context of scene apprehension and cross-linguistic event encoding research.
The Processing of Unaccusative Verbs: A Cross-Modal Lexical Priming Study

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Unaccusative verbs syntactically and semantically differ from another class of intransitive verbs – unergative verbs. Unergative verbs have Agent as a subject and unaccusatives Theme. Moreover, the subject of unergative verbs is generated in the preverbal position and the theme subject of unaccusative verbs is initially merged in the postverbal, complement V position and then moved to the preverbal position for case checking as unaccusative verbs cannot assign case (Burzio’s Generalization, 1986).

To test their syntactic structure, we designed a Cross-Modal Lexical Priming (CMLP) (Swinney, Onifer, Prather & Hirshkowitz, 1979) study in Bosnian/Croatian/Serbian (BCS) measuring reaction times for unaccusative and unergative verbs. In CMLP tasks, sentences are presented auditorily and at several points in the sentence, other items (probes) are visually presented. Probes can be related to the subject NP, unrelated to the subject NP and a non-word. The participant is asked to make a lexical decision about the probe (word, non-word) via button press. We predict that reaction time (RT) for related probes will be faster for unaccusative verbs than for unergatives. If the subject of unaccusatives originates postverbally, that means reactivation of the antecedent should occur at the trace. For this reason, probe is inserted at the trace position (immediately after the verb), 750ms and 1000ms after the verb, because in case of reactivation, the reactivated antecedent will serve as a prime for a semantically related probe at the reactivation site. Thus, the participant is expected to decide faster whether the present string of letters is a word or a non-word. Unergative verbs will not show reactivation in any of the postverbal positions since their subject never originated postverbally. Therefore, lack of priming will mean slower reaction time (Friedmann et al., 2008).

This study will provide an empirical insight into language processing in real time and it will make an original contribution to the experimental investigation of a South Slavic language – Bosnian/Croatian/Serbian.
References


Perception and production of constructions unique to L2: assessing grammatical proficiency using multiple measures

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In this study we investigated grammatical gender attainment in second language (L2) learners of German (n = 37) whose native languages lack this feature entirely (e.g., Turkish and Chinese). Comparing them to a native control group, we assessed whether or when native-like performance is possible. We analyzed both comprehension and production of gender concord, in offline (explicit knowledge) and online (implicit competence) measures: gender assignment, grammaticality judgement, free speech and brain activity (ERPs). The goal was to gain more insight into the influence of the task; the extent to which the tasks measure similar constructs; the sensitivity of each of the tasks; and the impact of participant characteristics (e.g., working memory capacity) on each measure.

First results show that natives outperformed learners throughout, but there was a wide range of individual performance in the learner group. In the learners, there were strong relationships between performance on gender assignment, grammaticality judgement and use of gender in free speech (rs between 0.58 and 0.76, ps < .001), indicating that these tasks measure similar constructs. However, no significant relationships between these three tasks and ERP component sizes were found. The same pattern emerged in analyses of participant characteristics, of which we found age of L2 acquisition, length of residence in the L2 country, and general L2 proficiency to be strong predictors of performance on the first three tasks (absolute rs between 0.42 and 0.76, ps < .01), while none of these predictors correlated with ERP size. Working memory capacity did not predict performance on any of the tasks. These results are consistent with the idea that knowledge of lexical gender determines learners’ performance with gender across tasks (Hopp, 2013). However, they also signal the need for a clearer understanding of what factors account for individual variation in the ERP signal of L2 learners.
References
Preparation for the worst may not be that bad in a second language mode: An ERP study on emotional anticipation in bilingualism

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Recent research suggests that bilinguals might process negative information on a shallower level in their second language (Jończyk, Boutonnet, Musiał, Hoemann, & Thierry, 2016; Wu & Thierry, 2012). In light of these findings, we set out to investigate whether operating in a first and second language might differentially modulate emotional anticipation mechanisms. We focused on the Stimulus Preceding Negativity (SPN) – a slow cortical wave that is known to index emotional anticipation processes (Michalowski, Pané-Farré, Löw, & Hamm, 2015; Moser, Krompinger, Dietz, & Simons, 2009).

20 immersed Polish-English bilinguals viewed word-picture pairs and were asked to determine upon seeing the picture whether or not it was congruent with the preceding prime cue. Each prime cue in a pair could be positive, negative, or neutral and was either congruent or incongruent with the following positive or negative picture. Word-picture congruity was established in a pre-experimental norming study. Word stimuli in both languages were balanced on valence, arousal, and numerous lexico-semantic characteristics; picture stimuli were normed and matched for valence and arousal. Each participant was first presented with a prime cue in L1 or L2 (e.g. “accident”) for 300 ms, which was followed by an interstimulus interval (ISI) of 3800 ms – the anticipation stage. Next, a picture was displayed for 200 ms and was followed by a blank screen (response window) for 2300 ms.

Preliminary results of the study demonstrate that language significantly modulates the emotional anticipation mechanisms, as indexed by a decreased SPN to negative word-picture pairs in English. The N400 time-locked to picture presentation showed a classical N400 effect to incongruent pairs, but it was not modulated by language of presentation. These findings provide novel evidence that operating in a second language may decrease a neurophysiological response to negative stimuli in the early anticipation stage.
References


Analyzing the variation in verb number in contemporary German with regression analysis

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Our corpus study is concerned with subject-verb agreement in contemporary German, more precisely the variation in verb number. We focus on subjects consisting of noun phrases coordinated by the conjunction „und“ (“and”), for instance:

„Die Wucht und Strömung war immens, die Pulosans wurden meilenweit ins offene Meer getrieben.“ (Engl: ‘The impact and current was immense, the Pulosans were driven miles away into the open sea’)

In our samples, both nouns are in singular. Number resolution – i.e., agreement between coordinated singular nouns and a plural verb – can be regarded as the default choice in contemporary German. However, our data show that eliding the second determiner in the subject enhances the probability of using the singular verb as in „war“ (“was”).

To investigate this ellipsis effect in greater detail, we used the KoGra-Corpus with additional meta data (country, region, domain and date) based on the DeReKo (Institute for the German Language) with 8 billion morpho-syntactically annotated word forms. The data extracted from the KoGra-Corpus were annotated regarding grammatical and semantic information, for example the degree of abstraction and the agentivity of the subject nouns.

We ran logistic regression models to analyze the influence of the fixed factors “presence of an ellipsis”, “agentivity” and “degree of abstraction” on the response variable “verb number”. The maximized models were tested against less complex models and the best fit model was taken as final model. The gained ellipsis effect is highly significant in German and Austrian texts. It seems to be weaker in Swiss texts. The models reveal that the ellipsis effect is stronger than the highly significant influence of abstraction and stronger than the significant effect of subject agentivity.
Trajectories in Analyses of Self-Translation

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The aim of this paper is to determine the degree of divergences in self-translation into an author’s native language, challenging the notion of originality, authoriality and authorial intentionality. All the provided examples are from Aleksandar Hemon’s short stories, self-translated from English (second language) into Bosnian (native language). The paper attempts to offer new insight into the features of self-translated texts by analyzing self-translation on the example of an author who, unlike most self-translators who are frequent subjects of case studies, after one foray into self-translation (into his native language) chose not to translate his own texts.

The methodology used for a comparative linguistic analysis of TT relies heavily on trajectories – an informal analytic system developed by Joseph L. Malone, which reveals plerematic translational patterns of the source and target texts and provides tools for an objective quantification of the disequilibrium between the TT and SS on multiple levels. The analysis focused on differences determined through plerematic categories, with a strong emphasis on extralinguistic effects of the changes to the ST. The analyses of TT and ST revealed differences in the author’s style on several levels – syntactic, semantic and extra-linguistic, which the paper attempts to situate within a wider framework of self-translation on a diachronic and synchronic scale.

Preliminary analysis revealed that Hemon’s style of translation differs depending on the language he is translating from/into. His translations into English are often macroscopic in relation to the source text, and entail shifts in tone and point of view. In some cases, the interaction of the TT and ST creates an infratext available only to the bilingual reader. Along with creating a more detailed similarity profile of the TT and ST, further analysis of the infratext can also contribute to the largely uncharted territory of translating specifically for bilinguals.
The epistemic implicature in Mandarin A-not-A questions

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This study investigates the semantic and pragmatic properties of Mandarin A-not-A questions (ANAQs), especially its “non-neutral” (biased) usage, which seems to be generally neglected in previous literature in which ANAQs are considered to be only compatible with neutral contexts (Li & Thompson 1981). Nevertheless, there’re evidences showing that ANAQs are not particularly restricted to neutral contexts, and some of them can even be considered as assertions rather than interrogations.

Instead of proposing a separate assertive speech act (Yuan & Hara 2013), we argue that it is the inherent information structure of ANAQ that determines its epistemic implicature. Here, we adopt the description of W.Wang et al. (2015) that the focus in ANAQs is always assigned to the A-not-A structure, with a slight precision that the notion of “focus” here is closer to that of “rheme”, which can either be contrastive or not (Vallduvi & Vilkuna 1998). The rest of the question forms the “topic”, which determines the set of possible worlds that the speaker proposes to partition in the way specified in the rheme, while in other forms of interrogation like MA-questions, where the set of possible worlds is not clearly specified, the proposition questioned can be already contextually salient.

We propose that it is from the contrasting of the rheme (A-not-A structure) that arises the bias implicature observed in some ANAQs. The contrasting evokes a set of alternatives, i.e. a set of ways of partitioning other than that specified in the ANAQs, where the truth value of the proposition in question (p) is already known. These alternatives constitute the speaker’s presupposition on the truth value of p, whence comes the bias. The prosodic stressing of the A-not-A structure observed in biased ANAQs also supports this analysis.

References


ABSTRACTS SESSION 2

Does distance between agreeing elements influence gender agreement processing in Dutch? An ERP study

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Establishing dependencies between elements of varying distance in an agreement relationship is an important factor in processing syntactic agreement. Various sentence processing theories have explored how structurally complex or long-distance dependencies influence agreement (e.g., Dependency Locality Theory, or DLT – Gibson, 2000) or the impact of word expectation on building a sentence structure (e.g., Suprisal theory; Hale, 2001; Levy, 2008). DLT maintains that increased distance between the agreeing elements implies more syntactic complexity, thus causing difficulty for the parser while processing. On the other hand, Suprisal theory posits that the difficulty of processing a word is directly correlated to its surprisal (the level of predicting or expecting a word) – the higher the surprisal, the more difficult it is to process a word. However, only a few studies have focused on the influence of linear distance (i.e., the number of intervening words between agreeing elements; e.g., Alemán Bañón, Fiorentino, & Gabriele, 2011; Kaan, 2002) in short-distance, or within-phrase agreement dependencies. The present study aims to bridge this gap by exploring the influence of linear distance on establishing within-phrase (determiner phrase, or DP) gender agreement in Dutch with the use of event-related potentials (ERPs) in order to obtain a unique insight into the temporal domain of sentence processing during reading. The stimuli consisted of grammatical and ungrammatical sentences with a gender violation in one of the two conditions (article-noun, or adjective-noun condition). In terms of ERP components, previous cross-linguistic research on gender agreement violations has elicited either a P600 or a LAN effect, or both. Consequently, the results of the present study will be discussed in light of sentence processing theories and ERP components activated. The study will thus indicate how ERPs can offer on-line evidence for the processing of syntactic agreement in real time and hence (dis)prove mainstream sentence processing theories.
References


The question whether verbal argument structure (AS) is preserved in deverbal compounds (DCs, i.e., compounds headed by deverbal nouns: e.g., ‘pest eradication’) is still a source of debate in the literature. While some argue for the presence of AS in DCs (Grimshaw, 1990; Alexiadou & Iordachioaia, 2015, i.a.), others claim that DCs cannot realize arguments and are similar to non-deverbal compounds, e.g., ‘chocolate box’ (most recently, Borer, 2013). The former analysis associates AS with the presence of ‘eventivity’/event structure and argues that only DCs with overt nominalizers can realize AS and event structure. Contrary to Lieber (2001), Grimshaw (1990) also argues that DCs with AS accommodate only internal arguments/objects (OBJ-DCs, e.g., ‘book/*student reading’). Consequently, attested DCs with external arguments/subjects (SUBJ-DCs, e.g., ‘police questioning’) pose a challenge to this approach.

In this study, I aim to investigate a) to what extent the AS of the verb is preserved in the corresponding OBJ- and SUBJ-DCs and b) whether the valency class of the verb and c) the presence of overt nominalizers correlates with AS and eventivity/event structure. I extracted a dataset of 1800 English DCs from the Gigaword and NOW corpora. These are balanced for verb classes (obligatorily transitive, unaccusative, unergative, alternating causative, and object-drop verbs) and head nouns (20 top frequent DCs per head, whether suffix-based or zero-derived). Three American English native speakers are annotating the dataset for the relation between the constituents (OBJ, SUBJ, OTHER) and for the degree of eventivity on a scale from 5 (event) to 1 (result or entity). The preliminary results (to be finalized by the time of the conference) indicate that a) unlike SUBJ-DCs, OBJ-DCs are indeed very productive and mostly associate with eventive-readings; b) the distribution of OBJ/SUBJ/OTHER varies across different verb frames; c) DCs headed by zero-derived nominals may also host objects.
References
Aging in an L2 context: A linguistic perspective on older migrants’ L2 use, health, and wellbeing

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As in many other Western societies, the group of older adults in the Netherlands expands and is becoming increasingly culturally diverse. As a result, a growing number of older adults age in an environment that differs linguistically from their mother tongue.

A substantial proportion of these older migrants, however, do not possess the necessary L2 skills to remain independent and manage their day-to-day activities in an L2 environment. Language barriers prevent access to and communicating about healthcare. These barriers persist because of overall limited educational experiences and/or decreased L2 learning abilities resulting from age-related cognitive decline (Kristiansen et al., 2016).

Moreover, not being able to communicate effectively in the L2 may detrimentally affect the type and degree of interaction and fuel withdrawal from communicative situations. Opportunities to practise the language decrease, leading to increased susceptibility to loneliness and depressive symptoms (de Bot & van der Hoeven, 2011).

This poster explores the role of L2 maintenance and use in the aging process of a group of older female Turkish adults by considering L2 skills in relation to wellbeing levels.

In doing so, data on migration history, L2 use, social conditions, perceived health needs, wellbeing, literacy levels and cognitive working memory load has been collected from interviews with 39 Turkish female older adults and a comparison group of low-literate Dutch adults.

Through theoretical concepts of multilingual aging as an interactive process (de Bot & Makoni, 2005), social embeddedness (Fokkema & Naderi, 2013) and insights from previous research on the health status of older migrants in the Netherlands (Parlevliet et al. 2016), the data are used to construct individual ‘aging profiles’. The profiles systematically investigate the influence of L2 use on social and cognitive wellbeing. They highlight individual differences in multilingual aging and help to shed light on the role language plays in the aging process.
On the pragmatics of compositional (a)telicity: a psycholinguistic study

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Traditionally, compositional telicity is taken to be a relatively clear-cut grammatical phenomenon, which involves the syntax-semantics interface: telic predicates – but not atelic ones – carry a culmination inference, integral to the predicate itself. However, non-culminating readings of telic predicates are actually found in a considerable number of languages (e.g., Arunachalam & Kothari, 2011). Based on our experimental data from adult Hebrew we propose that the telicity-value of a predicate is ultimately determined through a pragmatic process of conversational-implicature. This proposal accounts for the intra- and inter-speaker variation found.

We tested knowledge of telicity using a variant of the Truth Value Judgment Task (Crain & Thornton, 1998) with 15 Hebrew-speaking adults. Participants were presented with video-clips depicting an incomplete event and had to judge whether the accompanying (a)telic predicate truthfully described the event. There were six experimental-conditions: (in)definite singular count (e.g. ‘color-in a/the square’); (in)definite plural (e.g. ‘color-in (the) squares’); (in)definite mass (e.g. ‘color-in (the) material’). There were 5 items per condition and 16 fillers.

Our data reveal that Hebrew-speaking adults distinguish telic from atelic predicates in terms of their culmination requirements, with only 22% acceptance of telic predicates as true descriptions of incomplete events versus 89% acceptance of atelic predicates as descriptions of such events. Despite this clear distinction, it is also evident that the use of telic predicates as descriptions of incomplete events was licensed at a non-negligible rate. Thus, it appears that adult Hebrew allows for at least some non-culminating readings of telic predicates.

We propose a pragmatic explanation, built on the inherent ambiguity of such telic predicate as ‘paint the square’. Such predicates give rise to the relevant scalar alternatives ‘the whole square’ and ‘part of the square’. The consideration of these alternatives leads to two pragmatic strategies, one yielding a culminating reading and one a non-culminating reading.
Do you see when you read? Mental simulation of visual features during L1 and L2 reading comprehension

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During reading comprehension, readers would automatically simulate the described scenarios, reenact the perceptual, motoric and introspective traces acquired during experience with the world, body and mind (e.g., Barsalou, 2008, 2009; Zwaan, 2004). Unlike word learning in the first language (L1), which is often grounded in embodied information (e.g., the sensorimotor features of the referents), second language (L2) learning is often mediated by learners’ first language (i.e., in the less grounded fashion). Thus, whether people build up mental images when read L2 sentences as they do in L1? If not, in what way they differed?

48 Late Chinese-English bilinguals fluent in Chinese and English were recruited in the study. In experiment 1, participants were asked to read a sentence in either L1 or L2, and then be presented with a picture of an object. They were required to make judgment as fast as they could on the appearance/absent of the object in the sentence they just read (paradigm used in Stanfield & Zwaan, 2001; Zwaan, Stanfield, & Yaxley, 2002). Each experiment sentences implied the orientation or shape of a target object, and the object in each picture was either matched or mismatched its preceding sentence in orientation or shape. The results showed that participants understood sentences in L2 equally well as in L1, and they responded fast in match condition than the mismatched in L1 trials, whereas they did not differ in L2 trials. The results suggested bilingual readers implement less visual mental simulation while reading L2.

Experiment 2 was carried out to investigate whether the decreased mismatch effect of L2 found in experiment 1 was due to reduced (i.e., differences in amplitude) or delayed (i.e., differences in time-course) visual mental simulation during comprehending L2 sentences. Using the event-related potential technique (ERPs), it was found that the sentence-picture mismatch elicited N200, N300 and late time windows (400–800ms) components. Moreover, the peak latency of this N200 and N300 effect was earlier in L1 than L2, but the two languages did not differ in the
amplitude of the effect. The results indicated that the visual simulation processes was delayed rather than reduced during L2 reading comprehension than in L1.
What’s in a Name?: Neural processing of temporal violations through extralinguistic time reference

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The current ERP study investigates neural processing of extralinguistic time reference through semantic violations of time constraints determined by the lifetime of famous cultural figures.

The English past simple denotes an event in a completed time in the past, as in (1), while the present perfect involves a past event within an incomplete time frame, as in (2). Without lexical temporal phrases, agreement between time reference and verb morphology in (3) – (5) is dependent on extralinguistic information about the clausal subject. The verb morphology in (2) implies whether the grandmother is dead (went, past simple) or still alive (has been, present perfect). However, (3) and (4) are unambiguous, as names of famous cultural figures link the events to either ongoing or completed time reference (i.e., the lifetimes of Beyoncé and Frank Sinatra).

(1) I went to Mexico twice last year.
(2) I’ve been to Mexico twice this year.
(3) In her lifetime, my grandmother went/has been to Montréal.
(4) In her lifetime, Beyoncé *went/has been to Montréal.
(5) In his lifetime, Frank Sinatra went/*has been to Montréal.

Twenty-five native speakers of English will be visually presented with sentences one word at a time while EEG is recorded.

We predict that semantic-syntactic violations, as in (4) and (5), will result in an N400-P600 effect, whereas purely syntactic violations in sentences like (1) and (2) will result in a LAN-P600 effect. In the case of an absence of an N400 effect in the semantic-syntactic violations, an increase in P600 effect is expected as semantic and syntactic information can interact in the late syntactic stage (Friederici, 2002).

**References**

Before or After? Suffixes outperform prefixes in discrimination of complex L2 categories

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Computational simulations of category learning illustrate that category relevant features are better discriminated from irrelevant features when during training, many cues predict few outcomes (Ramscar et al., 2010). For learning of linguistic categories, we therefore hypothesized that suffix marking should be more beneficial than prefix marking as nouns are feature richer cues than category markers.

Besides this general hypothesis we further investigated how the characteristics of feature sets determines which type of marking is needed for successful category discrimination. For this, we built an artificial language in which nouns were distributed across four categories. Categories were either consistent in a simple, well-known semantic category feature, in a complex, less obvious acoustic feature (stress), consistent in both features or inconsistent in both. Applying the computational model from Ramscar et al. (2010) to these materials, we predicted that only suffix learning can correctly discriminate relevant from irrelevant features in complex feature sets. However our model does not predict a difference in learning for simple feature sets.

We tested these predictions in two behavioral experiments in which participants implicitly learned to associate images with acoustically presented sentences. Depending on the condition, categories were marked by prefix and suffix or only by prefix. An analysis of grammaticality judgments of sentences with novel nouns revealed that the complex acoustic feature was only learned when suffixes were present during training. We also found an advantage of suffix marking for the simple semantic features; however, also with prefix only marking, categorization performance was above chance level.

The results from our simulation and experiments demonstrate that succeeding category marking allows learners to focus more on category relevant features and to ignore irrelevant features. This suggests that input for language learners should be structured to provide information about linguistic categories (e.g. gender or case) in the form of suffixes.
References


A Diachronic Study of the Transparency of Sranan Tongo

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Transparency in a language refers to the existence of isomorphic relations between forms and meanings. Creoles are said to be more transparent than their source languages because they are formed by speakers of different languages attempting to maximise intelligibility. Our study is a diachronic analysis of Sranan Tongo, an English-lexicon creole with African, Portuguese and Dutch contributions. The data comes from the Suriname Creole Archive (SUCA) (van den Berg 2007) which archives texts from the 18th, 19th and 20th centuries. We hypothesise that creoles become less transparent with time, and predict that 18th century Sranan will be the most transparent; 20th century Sranan the least transparent; and 19th century Sranan less transparent than the 18th century variety, but more transparent than the 20th century variety. Our methodology draws on Leufkens (2013) which determines the transparency of four creoles relative to their source languages by comparing the number of opaque features found in the creoles and their relevant sources. We study the same features in the 18th, 19th and 20th century Sranan texts. If our predictions are borne out, then we should find that the number of opaque features increases with time, so that transparency decreases.

References

Emotion and Motivation

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By means of three independent research studies, I analyse the interaction of affective, motivational, and cognitive factors as they appear in relation to the context of a classroom. I argue that it is worthwhile to study the amalgams formed by these three forces by means of a dynamic systems–based research methodology.

In the first study, I demonstrate the existence of four main classroom states: interest, boredom, neutral attention, and anxiety. The factors forming the attractor basin for these states are cognitive, affective, motivational, and contextual in nature. This indicates that affect and motivation have an impact on language learners via the state they produce through their interaction with cognitive and contextual factors.

In the second research study, I analyse the self-regulation and perseverance of ten language learners from various backgrounds. I argue that a learner’s attractor basin produces a stronger and more positive attractor when there are strong motivational elements present, such as a well thought-out and sufficiently internalised goal orientation.

In the final research study, I demonstrate that the interaction of emotion and motivation is different for younger and older learners. For older learners, the motivational element plays a significantly more prominent part, while for younger learners the affective, cognitive, and contextual elements are more important. Furthermore, older learners have the ability to analyse and deconstruct their classroom state, while this is not the case for younger learners. Instead, the experience of the classroom for younger learners is made up of an indistinguishable combination of affective, cognitive, and contextual elements, which combine into an overall feeling of “I like it” or “It is difficult”. Although this can result in the impression that a young learner’s state is determined entirely by affective elements, this is most certainly not the case.
Modern Hebrew has 3 kinds of genitive constructions: construct state (CS), free genitives (FG) and double genitives (DG). This paper focuses on the puzzling fact that proper names (PNs) are often ungrammatical when embedded in a CS, but fully grammatical in FG and DG; for instance, /Sara’s cat/ may be translated as either /ha-xatul šel sara/ (FG, lit. ‘the-cat of Sara’) or /xatul-a šel sara/ (DG, ‘cat-poss.3sg. FM of Sara’) but not as /*xatul sara/ (CS, ‘cat Sara’). The theoretical question of why PNs are more restricted than other definites becomes even sharper in the context of the hypothesis that the CS head is interpreted as a function over individuals (Heller 2002, Dobrovie-Sorin 2003, Doron & Meir 2013). Furthermore, PNs are not always ungrammatical in a CS; but to date, no generalization has been proposed to capture this.

We argue that some of the interpretations of the CS discussed in the literature aren’t fully productive in contemporary Hebrew. Specifically, possessive CS is not truly productive (contra Heller 2002); while modificational CS (Borer 2008), where the embedded nominal is a modifier of the head (e.g., /ec ha-mango/ ‘the mango tree’, lit. ‘tree the-mango’), is extremely productive. Thus, CS with a PN is acceptable when the PN is modificational (e.g., /tisroket elvis/ ‘Elvis-style haircut’) or if the entire CS is frozen or ‘borrowed’ from archaic or formal Hebrew.

This hypothesis has consequences for the interpretation of CS with common nouns; the unavailability of possessive readings can be seen with ‘unstored’ novel CSs (e.g., /*mikledet ha-xatul/, lit. ‘keyboard the-cat’). We also present data from a large corpus of Wikipedia entries, which shows that the ratio of CS to total genitives is much lower with PNs, and human PNs in particular, than with common nouns; and that attested CS with human PNs rarely involves possession.

References
Prominence in Persian words has widely been described as ‘word stress’ (Ferguson, 1957; Kahnemuyipour, 2003, among many others). An important aspect in which the notion of Persian ‘word stress’ is flawed is that the location of ‘stressed’ syllables is entirely governed by syntax. That is, neither is it the case that ‘stressed’ syllables are in any way determined in the lexicon, nor is it the case that they are determined by the phonology, whether lexical or post-lexical. Persian ‘stress’ functions in syntax much as would a segmentally encoded particle. This is the claim which we will attempt to defend on the basis of a large body of evidence.

This observation may call into question the widely held view that post-lexical phonology is governed by the prosodic hierarchy (cf. Nespor and Vogel (2007)). Moreover, our data might have important implications for word segmentation in a pure syntactic sense.

References
An account of syntactic and pragmatic differences in terms of unifying semantic features: The case of *parce que* /because and causal relations

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I will suggest a new formal analysis of the different meanings and usages expressed by French causal connective *parce que* (because) in terms of a set of semantic features.

a) On one hand, *parce que* expresses several types of relations in the following form: X parce que Y. I will illustrate this “multifunctionality” in terms of content (1) vs. epistemic (2) vs. speech act (3) domains (Sweetser 1990), and use a second-order distinction between abductive (2.a) and deductive (2.b) epistemic usages:

1. John came back PCQ he loves her.  
   Content: P pcq Q

2.a John loves her, PCQ he came back.  
   Epistemic abductive: Q, pcq P

2.b John will come back, PCQ he loves her.  
   Epistemic deductive: P, pcq Q

3. Will John come back? PCQ he loves her.  
   Speech act: P? Pcq Q

b) On the other hand, a causal relation can be construed in various syntactic structures, as the initial position of the connective (4) and the two types of focalisation (5, 6).

4. PCQ John loves her, he came back.  
   PCQ Q, P

* 4’. PCQ John came back, he loves her.  
* PCQ P, Q

5. It is PCQ John loves her that he came back.  
It is PCQ Q that P
*5’. It is PCQ John came back that he loves her.
   *It is PCQ P that Q
6. If John came back, it is PCQ he loves her.
   If P, it is PCQ Q.
*6’. If John loves her, it is PCQ he came back.
   *If Q, it is PCQ P

I claim that these syntactic modifications have a pragmatic impact on the interpretation: focalized content and epistemic deductive relations become abductive, while for abductives, the connective in focalized and initial position results in invalid structures (4’, 5’, 6’). I demonstrate and formalize the differences in meaning in terms of causal (cause–consequence), informative (new–given) and argumentative (argument–conclusion) statuses of the segments, and their orders.

The annotation of causal relations in terms of the mentioned features helps to understand the reasons behind the impossible structures (4’), (5’), (6’), that I generalize in terms of postulate of proximity between PCQ and Q: No other particle can intervene between parce que and Q, Q must be immediately next to parce que, either from the left or from the right!

References
A Corpus Study on Metaphor Use in Aphasia

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AphasiaBank is a computerized database of interviews between persons with aphasia (PWAs) and clinicians. Specifically speaking, it has used a standardized protocol to collect narrative, procedural, personal, and descriptive discourse from 290 PWAs, as well as 190 control participants. (MacWhinney & Fromm, 2016). My study aims to compare distribution of metaphor within word class and categorization of metaphor between English-speaking fluent aphasia participants and control group. Only utterances on free speech task (speech, illness story and important event) are selected and analyzed.

A.Kaal (2012)’s research on metaphor in conversation revealed distribution of metaphor per word class in conversation, and my analysis tends to find out distribution of metaphor in conversation of aphasic and healthy groups. Moreover, some typical aphasic metaphorical expressions can be categorized as “human body is a machine”, “disability is losing a possession”, “disability is less than whole”, restitution metaphor, violence metaphor, journey metaphor, etc. There may be some differences in metaphor framing between these two groups when talking about illness or injury experience and their opinions on speech and communication.

Characteristics of production of metaphorical expressions in aphasia setting, especially in fluent aphasia context, may be detected after quantitative and qualitative analyses of data from AphasiaBank.

References
Social language variation through the perception of modern Russian citizens

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Variation in language can be interpreted in accordance with our personal attitudes and perceptions of social variables associated with certain linguistic variables. This, in turn, reflects a close relation between language and the social structures within our societies (Trudgill, 2000). Background: The perception of language variation in relation to social variables is well-researched in the Western hemisphere, but not when it comes to the Russian language. This paper aims to begin filling in the knowledge gap on sociolinguistic stratification in Russian society. Methods: An adapted matched-guise technique was used to test perceptions of sociolinguistic variation and social stratification by participants from St. Petersburg, Russia (N=42). Casual speech recordings of 10 speakers were obtained from the ORD Corpus (Один Речевой День/One Spoken Day; Asinovsky, Bogdanova, Rusakova, Ryko, Stepanova and Sherstinova, 2009). The speakers were rated on their speech qualities, on a 7-point Likert scale, and on their social variables, through open-ended questions. A post-experimental discussion on issues of social stratification has provided more insight for further interpretations. Results: The post-experimental discussion has resulted in the creation of a list of social strata and groups perceived by modern Russian citizens, reflecting the contemporary social structure in Russia. However, preliminary statistical analyses of speech perception ratings point only towards direct correlations between speakers’ perceived intelligence, language skills and language richness. No clear links were found between speech perception and social strata and groups yet. Conclusions: There were no clear links found between speech perception and social strata and groups in Russia yet. These and other results are discussed in light of language ideologies and social stratification among the participants and the contemporary Russian society.

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The Netherlands is viewed as a culturally progressive and LGBT tolerant country, with a positive attitude towards homosexuality and bisexuality. Recent population surveys indicate a 10% disapproval rate of transgender people, as opposed to a 7% disapproval rate of homosexuality (Kuyper, 2016). However, public opinion on transgender people has not been studied in depth.

Recently, there has been a rise in the Dutch media’s coverage of trans-related stories (from approx. 400 articles in national newspapers in 2007 to approx. 1100 in 2016). In response, the Dutch Transgender Network has proposed several media guidelines (TNN, 2016). Because of this rise and the lack of research, I decided to analyse the media’s representation of transgender people.

To gain perspective on the linguistic aspect of said representation I built a corpus consisting of Dutch national newspaper articles from 2007–2016 containing trans-related terminology. For this poster, the 2007 and 2016 sub-corpora, and their respective left-wing and right-wing newspaper sub-corpora were analysed to track the development of transgender representation over the last 10 years [see Baker, 2014 for a comparable methodology].

Whereas UK press coverage, for example, of transgender stories is more right-leaning (Baker, 2014), its Dutch counterpart is more left-leaning. The Dutch press in general tends to take a more neutral stance and focus more on public debates than human interest stories. Does this also lead to a more progressive and/or neutral representation of transgender people? Have linguistic representations in terms of keywords, collocates, word frequencies, agent/patient verb processes, topoi, and essentializing noun patterns changed over the years?

References


Changing trends in research articles: investigating informality

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Academic genres have often been characterised as “uptight”, conservative and resistant to innovation (Heylighen & Dewaele, 1999; Hundt & Mair, 1999; Seone & Loureiro-Porto, 2005). This paper builds on the question asked by Hyland & Jiang (2017), on whether academic writing has recently been more informal, affected by the trend observed in other written and spoken domains (e.g. journalism, business correspondence). Following the steps described by the researchers, we investigate informality in research articles from Economics, Business, Philosophy and Medicine.

Reporting on our work in process, we describe the corpora compiled for this study and the methods of analysis. Three corpora have been constructed, representing research articles from the four disciplines at three periods over the 50 past years: 1965, 1985 and 2015. The corpora are also POS (Part of Speech) tagged using TagAnt (Anthony, 2014). The focus of the analysis is on ten features of informality used by Hyland & Jiang (2017), a set of features based on previous work by Chang & Swales (1999). WordSmith Tools (Scott, 2015) is used for the analysis of texts.

Change in the use of individual features will be presented quantitatively for each time period and discipline discussing their use in context with example sentences from the corpora. Overall change will also be presented based on all measured features and will be contrasted to Hyland & Jiang’s recent findings in four different disciplines (Applied linguistics, Sociology, Electrical engineering and Biology) in order to see if there there are any remarkable differences in authorial practice.

References


Large-Scale Language Identification for Closely Related Languages

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Language identification is one of the most challenging, yet incredibly relevant tasks in computational linguistics. Well-performing systems are necessary for both conducting linguistic research and creating various applications that work with texts. There have been a lot of attempts to solve this problem over the last 25 years; from the very start the approaches showed promising results (Cavnar & Trenkle, 1994; Dunning, 1994). It is however not a solved problem yet. Many papers show near-perfect results for identifying languages (Simões et al., 2014; Mathur et al., 2015), however their results rarely account for very similar languages and language varieties. Thus, there is still a lot of work to be done in increasing the number of languages for identifications and the coverage of types of texts for which the systems work. Therefore, the goal of this work is to create a large-scale multi-domain language identifier that can distinguish between very similar, related languages and languages that have undergone significant language contact. As part of the work we combine the data that have been used for solving the problem of language identification in the past with new data and more languages.

In this work we explore the applicability of different methods of language identification and adapt them to perform best on both known datasets as well as unexplored ones. We train and evaluate the systems on in-domain, cross-domain and multi-domain datasets. We also report our achievements in the VarDial 2017 shared task on Discriminating between Similar Languages and the PAN17 Author Profiling shared task (gender and language variety identification in Twitter).

References


The current study investigates the added effect of cognitive decline on hypokinetic dysarthria, a speech disorder associated with Parkinson’s Disease (PD).

A common feature of hypokinetic dysarthria is imprecise vowel articulation due to a restricted range of voluntary movements of the articulators (Sapir et al., 2010). Previous studies have shown that the severity of imprecise articulation depends on the cognitive complexity of the speech task. Spontaneous speech has been found to be most sensitive to acoustically detect vowel articulation abnormalities, presumably due to its higher cognitive and linguistic load (Rusz et al., 2013).

Therefore, we suspect individuals with both PD and mild cognitive impairment (MCI) to exhibit less precise vowel articulation during spontaneous speech than non-cognitively impaired individuals with PD.

Various acoustic measures were extracted from the point vowels /i/, /u/, and /a/ produced during spontaneous speech recordings. These measurements were then compared between three groups: individuals with PD and additional MCI (n=6), individuals with PD (n=8), and age-matched speakers without neurological diseases (n=11).

Descriptive statistics of all vowel measurements indicate that individuals with PD and MCI manifest more severe vowel articulation abnormalities across all acoustic measures than controls and individuals with PD only.

Conducting Kruskal-Wallis tests to compare vowel measurements between the groups we found a significant difference between the controls and the individuals with PD and MCI (H(2) = 6.17, p < .05).

The preliminary results confirm the expected trend that cognitive impairment in PD exacerbates imprecise vowel articulation during cognitively demanding speech tasks.

This observed trend supports the sensitivity of spontaneous speech as a task to assess speech disorders. Apart from offering a simple, fast and inexpensive method of assessment, the acoustic analysis of spontaneous speech is low discomfort for
individuals with PD and is a naturalistic representative of a speaker’s articulatory abilities.

References

Does the result justify the means? The representation of resultative events in Mandarin and Spanish

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How do speakers of different languages encode and memorize resultative events? (i.e. events in which actions are directed towards the achievement of a clear result: “cut paper”). Is the culmination of events universally salient, or are there cross-linguistic differences in how people represent resultative events in memory? We compared Mandarin and Spanish to investigate to what extent habituation to the use of different verbal structures influences the representation of resultative events in memory, when these events are verbally described (thinking for speaking effects) and when they are not (potential linguistic relativity effects).

While Mandarin makes use of resultative verb compounds (RVCs) to separately encode the manner of action in the main verb and the result in a resultative complement (Chen, 2016; Tai, 1984; Talmy, 2000), Spanish is a language in which uses atelic and telic main verbs for encoding either the manner or result of events (García del Real, 2015; Slobin, 1996).

We report 2 experiments, with 2 different groups of native speakers of Mandarin and Spanish each. The verbal experiment involved the description in their mother tongue of filmed events (resultative, and non-resultative), shown as either ceased (e.g., at the end, a paper is completely cut by half) or ongoing (e.g. at the end cutting a paper is still in progress). The nonverbal task involved detecting whether occasional screenshot in between videos belonged to the last video participants had seen). After either encoding task, a surprise recall task was conducted: participants saw screenshots depicting the filmed events as either ceased or ongoing and they had to judge whether the screenshots reflect how the videos ended during the encoding phase. We hypothesized that an enhanced memory of the end of resultative events would indicate the inclination of speakers towards attending event results during the verbal and non-verbal encoding of events.
References


Does degree of bilingualism influence trilingual word recognition?

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This study looks at the influence of the degree of balance in L1 and L2 on L3 lexical processing in three related languages: Frisian, Dutch and English. Two in-between language priming experiments, a lexical decision task and a naming task, consisting of cognates, non-cognates and pseudo words, were used to study lexical access in word recognition in bilinguals acquiring a L3. Participants were first year secondary school pupils – balanced and non-balanced bilinguals – who were tested three times in one school year. The research questions were: 1) does the degree of bilingualism in the L1 and L2 influence the speed of lexical access in word recognition in L1, L2 and L3? and 2) how does growing L3 fluency influence the speed of lexical access in all three languages over time? Results were analysed using a mixed model with crossed random effects.

On the basis of the BIA+ model by Dijkstra and Van Heuven (2002) it was hypothesized that, compared to non-balanced bilinguals, balanced bilinguals would have faster RTs for cognates because of the orthographic similarities and phonological and semantic overlap of the three languages and slower RTs for non-cognates because of more word candidates. Furthermore a symmetrical priming effect and faster development of RTs during the school year were expected.

Contrary to BIA+ predictions and findings by similar studies (e.g. Bijeljac-Babic, Biardeau & Grainger, 1997; Duñabeitia, Perea & Carreiras, 2010; Van Hell & Dijkstra, 2002) almost no differences were found between the two groups. Both groups responded faster to cognates than non-cognates and had asymmetrical semantic priming effects for both experiments. Furthermore almost all initial differences between the groups disappeared by the end of the school year. Hence, the degree of bilingualism in two related languages had no influence on the speed of lexical access on word recognition in a related L3.
References


Phrasal or clausal conjunction? – postverbal conjoined subjects in Bosnian/ Croatian/ Serbian: an experimental study

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In some previous experimental work on agreement strategies in South Slavic languages (see Marušič et al. (2015), Willer-Gold et al. (2016), Čordalija et al. (2016)), it was demonstrated that the closest conjunct agreement (CCA) is the only available strategy for agreement with conjoined NPs in postverbal contexts. However, the examples that are claimed to be a result of CCA in postverbal contexts could potentially be analysed as clausal ellipsis (CE).

The CE analysis of examples with postverbal conjoined subjects was actually argued for by Aoun, Benmamoun and Sportiche (1994). In their approach based on examples from three dialects of Arabic, the postverbal linear agreement was actually claimed to be a result of CE, not of CCA. Thus, they predicted a semantic independence of two coordinated events. However, Munn (1999) pointed out that this claim is difficult to defend if a specific type of predicates were taken into account – the so-called collective predicates. Therefore, we designed a sentence-picture matching experiment with collective verbs and postverbal subjects with speakers of Bosnian/ Croatian/ Serbian in order to test whether postverbal linear agreement was a result of phrasal coordination or CE.

The study managed to show that CCA is not a result of CE, but a distinct agreement strategy. Since the experiment demonstrated no significant difference in ratings between sentences containing conjoined &P subjects and simple NP subjects with collective verbs, we concluded that sentences with conjoined &P subjects and collective predicates (collide-type verbs) were not derived by means of CE. Otherwise, such sentences would be rated considerably lower than all others, because the picture with which such sentences were paired would be incompatible with the interpretation which assumes two-event semantics. And such readings would be inevitable if such sentences underlyingly had a biclausal structure.
Visual and acoustic input is important in language acquisition[3,4]. Recent studies of Ménard [2] have shown that the articulation of Canadian-French speakers who are congenitally blind (CB) differs from articulation of non-blind (NB) speakers. Lip movements of CB speakers are less strong than those of NB speakers. They compensate by using stronger tongue movements[1,2]. However, this compensation strategy is not sufficient, as the acoustic difference between certain vowel pairs is more pronounced in NB speech. This suggests a clear link between visual input during language acquisition and the resulting pronunciation.

The performance of ASR systems relies on the acoustic model. The acoustic model is based on the relation between the acoustic speech signal and individual sounds, which in turn is based on speech of NB speakers. This means that if Dutch CB speakers indeed have a tighter formant space in their running speech, ASR systems are expected to have more trouble with recognition of their speech.

We investigated acoustic (ASR, formant measurements) and articulatory (video, articulography) properties of 22 CB and 31 NB Dutch speakers for read and spontaneous speech. We present the results on the efficacy of ASR. The analysis of the articulatory (EMA) data is in progress; we will present the acoustic results in relation to the articulatory results.

Preliminary analysis of the acoustic data indicates that ASR software performs better for read CB (n=10) speech than for read NB (n=11) speech (p<0.001). For spontaneous speech no significant difference between CB and NB was found (p=0.84).

As CB speakers read more slowly (Braille vs. print), they have time to pronounce words more carefully. This is reflected in the results; clear speech is better recognized by ASR systems. This distinction was not found in the spontaneous speech condition where CB speakers spoke at least as fast as NB speakers.
References


Identifying quality differences in low vowels in German with linear mixed models and logistic regression

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The German vowel system is characterized by a binary opposition associated with phonetic differences pertaining to vowel quality and duration. Only the two low vowels as in _<Saat>_ ‘seed’ vs. _<satt>_ ‘full’ are often claimed to differ solely in duration. To investigate potential quality differences in the two vowels we conducted statistical studies based on dynamic acoustic measurements. We used the Kiel corpus, the “Deutsch heute” corpus, the Oldenburg Logatome Speech Corpus and an experimental corpus focused on minimal pairs.

Statistical analyses were processed for stressed vowels. In a first step we used linear mixed models to analyse the influence of the VARIANT [<_Saat>_ type vs. _<satt>_ type vowel] on the following response variables: F1, F2, F3 frequencies at different time points, duration, Euclidean distances, F1- and F2-slope. To control for the variability among individuals, random intercepts for speakers were included. We find significant differences in all corpora in F1, F2, duration, F1- and F2-slope. _<Saat>_ type vowels are significantly longer than _<satt>_ type vowels. F1 frequencies are significantly higher in _<Saat>_ compared to _<satt>_ type vowels, whereas F2 frequencies are significantly lower. F1-slope is significantly higher and F2-slope is significantly lower in the _<Saat>_ type vowel.

In a second step we ran a logistic regression to analyse and rank the influence of formant frequencies, duration, Euclidean distance and formant slopes as fixed factors on the response variable VARIANT. We compare the differences of log-likelihood values between different models leaving out certain fixed factors to figure out, how a factor improves the fit of a model. The robust main factors for differentiating the two low vowels are duration followed by F2. However the vowel formant values for F3, F1- and F2-slope also show significant differences among _<Saat>_ versus _<satt>_ type vowels (in different rankings in the corpora).
“It ain’t nuthin’ but a ‘G’ thang”: Rap flows as evidence for the connection between language and music

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The present study is concerned with the connection between language and music. This connection was studied from a novel perspective, namely in the context of regional variation in African American English (AAE) and hip-hop music.

In hip-hop culture, regional affiliation is key to people’s sense of identity. Language is one of the prime means of communicating regional hip-hop identity, as hip-hop aficionados employ regional AAE dialects to ‘represent’ for their region (Morgan, 2001). Regiolects can differ from each other regarding prosody: the rhythm and ‘melody’ (i.e. pitch contours) of speech. In music, rappers make use of distinct regional rapping styles – ‘flows’ – to express regional identity. Rap flows can be defined as the rhythm and ‘melody’ of rap performances.

Considering both prosody and flow are related to rhythm and pitch fluctuation, it has been suggested there might be a connection between regional prosody features and regional rap flow characteristics (e.g. Kautny, 2015). This study is the first to investigate this in detail. It does so in the context of two rival hip-hop regions: the United States’ East Coast and West Coast.

This study aims to identify whether East and West Coast AAE prosody and East and West Coast rap flows respectively differ from each other in similar ways. To this end, free speech interview recordings and a cappella rap verses of rappers from the East Coast and the West Coast were phonetically analyzed for prosody and flow respectively.

The preliminary results indicate that prosodic differences between East and West Coast AAE are reflected in these regions’ rap flows. This suggests that the nature of a specific region’s language variety informs the musical styles associated with said region. Although a larger sample size is required, these findings offer support for the idea that language and music are intricately connected.
References


Gender inferences based on stereotypes and a generic masculine pronoun: Does Dutch zijn ‘his’ induce a male bias?

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As language users, we fill in information that is not explicitly mentioned in a discourse. For example, we tend to infer someone’s gender based on stereotypes (e.g., florists are female, Carreiras et al., 1996). In addition, masculine generics can trigger gender inferences (e.g., Gygax et al., 2008). These are nouns and pronouns which carry masculine grammatical gender, but are intended to refer not only to men, but to all genders. For example, in languages such as French and German, the noun *florists* would carry masculine gender when referring to a mixed group of male and female florists.

Research into gender inferences has largely focused on occupational stereotypes and the grammatical gender of these occupational nouns, but other types of masculine generics were largely neglected. In the present study, the Dutch possessive pronoun *zijn* ‘his’ – serving as a masculine generic – was embedded in contexts featuring stereotypically male, female or neutral activities (e.g., tying shoelaces). The hypothesis that *zijn* would lead to a male bias mediated by the stereotype context was tested in an eye-tracking experiment. Eighty-two participants (38 male) read short texts consisting of two sentences. The first sentence featured the masculine pronoun and introduced a group engaging in a stereotypical activity. In a second sentence, a male or female member of this group was mentioned by name. The results suggest that the masculine pronoun is indeed interpreted as generic. Thus, despite the pronoun carrying masculine gender, no advantage was found for the processing of male over female proper names. However, a clear effect of stereotype emerged. After introducing a female stereotype, reading about a man led to an increase in processing time, but the reverse did not hold. This parallels the finding in social psychology that men are penalized for gender-nonconforming behavior more (Sirin et al., 2004).
References


Narrative Practices of (Self)Presentation: How Companies present themselves in Web Formats

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This linguistic project focuses on narrative self stylization, which companies use to express themselves in various web formats.

With the help of narratives companies are able to present their specific characteristics and values to recipients and embed their philosophy in meaningful frames. By establishing narratives about, e.g. working environment, social projects etc., companies create unique and specific corporate features to transport the way they would like to be seen from the outside.

The internet is a multimodal resource of sense-making (Sinnkonstitution, Androutsopoulos 2010: 425) and an interactive means of communication, which offers companies new opportunities to communicate with their target audience (Pleil/Zerfaß 2014). As the internet presence is gaining importance for external corporate communications (Hillmann 2011; Rossmann 2012), I analyze these narratives in social media and on websites.

I collected 960 texts, films and pictures in total which were published from 2013 to 2017. This sample was taken from the internet presence of ten German companies from over five industrial sectors. The 960 texts, films and pictures were stored in the program MAXQDA which allows me to label specific traits of (self) presentations and to draw comparisons. Close attention is paid to the linguistic focuses of lexis, syntax and style as well as pragmatic aspects (stereotypes, speech acts) with regard to the narrative traits (participating players, topic development, narrative signals) of the texts.

The aim of my qualitative analysis is to link formal and functional aspects of the entrepreneurial narratives. For this reason, this study is based on two research questions: (1) How do companies transfer narratives in different web formats? (2) In which way is this constitutive for a specific (self)presentation? With the help of these research questions, structures of narrative implementation and the relevance of narratives in the context of external corporate communications can be analyzed. Furthermore, these strategies can be critically challenged. The narratives in this
sample are vermittlungssprachliche Texte (Hundt 2000: 654), because they address recipients directly and inform them about companies’ attitudes toward subjects which support the (self)presentation of the companies, e.g. environmental protection, social engagement or support of employees. These narratives are objects of interaction, which locates the project in communication-oriented textlinguistics (kommunikationsorientierte Textlingusitik, Gülich 1976, Brinker/Clöfen/Pappert 2014).

First results show in which way entrepreneurial narratives created by employees on their corporate blogs establish a new narrative advertising-hybrid in terms of emotional and experience-oriented advertisement (Ackermann: to be published). Additionally they show that the boundaries between corporate communication, advertising, customer care and recruiting blur (Pleil/Zerfaß 2014: 731).

References


ABSTRACTS SESSION 3

Exhausting *po* – Spatial and individual distribution in Serbian

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**Background**

Recent experiments suggest that Distributive Share markers have exhaustivity requirements (Bosnić et al, in prep). In picture verification tasks testing intransitive sentences with Serbian *po* and Koren -ssik, Bosnić showed that sets of relevant event participants (agents) were found to be crucial for defining spatial units that were the Sorting Key. This was regardless of the number of participants per unit; for every set of event-participants, relevant participants restricted by the Share marker need to be exhausted by the relevant event. However, the distinction between distribution over individuals and over spatiotemporal units is not yet clear-cut. The current study tests generalizations made in Bosnić et al by extending them to transitive sentences with *po* marked objects.

**Method**

We tested 58 people with a picture verification task (Truth Value Judgement) and a 2x3 design with two factors of Group Size (One vs. Four) and Exhaustivity Type (Exhaustive, Non-exhaustive or Different Exhaustive). The test sentence accompanying the situations is in (1):

1. Majmuni nose po jedan kišobran.
   Monkeys are carrying *dist* one umbrella

We wanted to check whether spatial distribution is reducible to individual distribution and whether the previous generalizations are transferable to the situations where the distributive marker *po* is marking the object in transitive sentences.
Results

They show that spatial distribution can be reduced to the individual distribution but the group-forming condition (depicting spatial rather than individual distribution) had only 58% acceptance. In fact, there seems to be two different populations of people that either systematically say YES or NO to that condition. This may indicate that people may have two distinct intuitions about what *po* actually means – *po* can allow group formations and that it means “in every group”, or it is only allowing individual distribution. Further research aims at addressing these questions.

References

Out of use, out of mind? The age effect in first language attrition

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In this study, we aimed to look at the role of age of emigration (AoE) in the online processing of grammatical gender in first language attriters, using event-related brain potentials (ERPs). The participants were fifty Dutch emigrants who had lived in Canada or the US for at least seven years and who were no longer dominant in their L1 Dutch. These L1 attriters participated in an auditory ERP experiment, in which they were presented with correct and incorrect use of grammatical gender agreement in Dutch. Native speakers are known to show a P600 after being presented with gender violations as compared to correct gender use. In the present study, we performed a generalized additive modeling analysis with AoE (ranging from 5 to 48) as a continuous factor. With this analysis we show that AoE has a nearly linear effect on the ERP waveform, in that the older the emigrants were when they left the Netherlands, the larger their P600 effect was on the gender violations. With these results, we argue against the idea of a critical period hypothesis in first language attrition, and propose the idea that the longer people have been immersed in their first language environment, the stronger the connections are and the easier it is to access the L1.
How much are we influenced by linguistic habituation? The representation of resultative events by Dutch adults and children

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Linguistic relativity studies find that adults are influenced by linguistic habituation when they encode and memorize events (Papafragou, Hulbert & Trueswell, 2008; Sakarias, 2016; Flecken & Gerwien, 2013). The present study asks to what extent children are also habituated. On the hypothesis that the structure of one’s language shapes event perception, we expect adults to show the same accuracy in memorizing events in a verbal and a non-verbal task. With children aged 6 or 7, this might not be the case since they are not yet robustly habituated in the use of verbal structures. I compare Dutch adults and children to investigate to what extent habituation in verbal structures influences the representation of resultative events in memory, when they are verbally described (which could reveal thinking-for-speaking effects) or not (which could reveal linguistic relativity effects).

I am presently collecting data with two different groups of native speakers of Dutch: 50 children and 50 adults. In the verbal experiment one group of adults and children describes short movies, which show resultative and non-resultative events shown either in a ceased or ongoing stage of the action. In the non-verbal experiment, a different group of participants watch the same movies and judge whether or not occasional video stills match the last video they have seen. After a short interruption during which participants do a working memory task, both groups are presented with a surprise memory task: participants have to decide if video stills match the ending of the movies they saw in the first task. The stills either match or do not match. I expect that adults will have higher accuracy raters than children, both in the verbal and the non-verbal event encoding version, whereas children in the non-verbal encoding will show a lower accuracy than children in the verbal encoding group. I expect to complete my analyses by the beginning of June.
References


The effect of bilingualism on the distribution of ASD and ADHD traits in a general sample of primary school children

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Research has shown that bilingualism leads to advantages in certain aspects of language, such as pragmatic skills (Siegal et al., 2010; Antoniou & Katsos, 2017), and executive control skills, such as cognitive flexibility, attention, and working memory (for example, Bialystok, 2011; Hilchey & Klein, 2011). Deficits in these skills are constituent components of autism spectrum disorders (ASD; Landa & Goldberg, 2005; Bodner et al., 2015) and attention deficit/hyperactivity disorder (ADHD; Barkely, 1997; Brown, 2014; Schreiber et al., 2014).

Recently, there has been some investigation of the effects of bilingualism on language and cognition in individuals diagnosed with ASD/ADHD (Mor et al., 2015; Bialystok et al., 2016, Uljarević et al., 2016).

To our knowledge, no study has investigated the association between the prevalence of traits of ASD/ADHD symptomatology and bilingualism in the general population. This is a topical question, given that an increasing proportion of the world’s population is bilingual, and every individual, including typically developing individuals, exhibits traits of ASD and ADHD symptomatology to some (low or high) extent.

The current study examines a heterogeneous sample of 387 children in UK primary schools (of which 158 are bilinguals), age range 5 to 11 years, with the aim of answering the following two related but distinct research questions: (1) Is there a difference in the proportion of monolinguals and bilinguals among those with a high and those with a low level of ASD and ADHD traits? (2) Do monolinguals and bilinguals differ in their levels of ASD and ADHD traits? A parental questionnaire was used to determine language background of the participants. The levels of ASD and ADHD traits were measured with the Social Skills Improvements System Rating Scales (Gresham & Elliott, 2008). The current study presents the preliminary statistical analyses.
References


How Speech Production Declines with Age: an EEG Study

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The present study aims to identify if anomalies due to aging, such as a delay or deviance, arise in specific components of speech production using electroencephalography (EEG). Age is known to decelerate and decrease speech production fluency in single word retrieval and sentence production (Spieler & Griffin, 2006). Behavioural research supports the Transmission Deficit Hypothesis which proposes that age effects are largely, if only, due to weakened connections between word lemma retrieval and phonological word form retrieval (Burke, Mackay, & James, 2000).

The present study is part of den Hollander, Bastiaanse, Laganaro, & Jonker’s (2016) research and will directly compare EEG recordings of ten young adults to ten older adults, all native speakers of Dutch. Event-related potentials (ERP) targeting separate components of speech production will be used to compare the online processing of speech production as an effect of age. A variety of studies have used ERPs to describe separate speech production components such as lemma retrieval, phonological encoding, and phonetic encoding. Moreover, all components of speech production have successfully been singled out with the usage of ERPs in a group of young adults in one single study (den Hollander et al., 2016).

Two components of speech production will be distinguished on the basis of two speech production tasks included in the experiment of den Hollander et al. (2016). Firstly, lemma retrieval will be singled out in a picture naming task manipulated for the semantic interference effect, meaning that naming latencies increase with each item of the same semantic category. Secondly, phonological encoding will be targeted in a second picture naming task manipulated for age of acquisition.

Based on previous behavioural studies (Burke et al., 2000), we predict that anomalies as an effect of age will arise in the second picture naming task targeting phonological encoding.
References
From Omnivore to Herbivore: Explaining Vegetarianism and Veganism Among American Students applying a Reasoned Action Approach

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On a global scale, the production and consumption of meat have a large negative impact on our world, causing greenhouse gas emissions (Hedenus, Wirsenius & Johansson, 2014; Hertwich et. al., 2010), threatening individual and public health (Cooney, 2014; Yokoyama et al., 2014) and affecting animal and human rights (Pew Commision, 2008). While the adoption of vegetarian or vegan diets is increasingly prevalent, effective interventions encouraging such diets are welcome. For this purpose, a Reasoned Action Approach to behavioral change was applied to investigate intention formation for having a vegetarian and having a vegan diet (Fishbein & Ajzen, 2010). Study 1 is a belief elicitation study that was carried out to determine salient belief structures of a sample of U.S. students. Study 2 is a survey study aimed to determine to what extent reasoned action variables, Attitude, Descriptive Norm, Injunctive Norm and Perceived Control explained Intention to change one’s diet in a separate student sample. The belief elicitation study collected 48 unique attitudinal, normative and control beliefs about having a vegetarian/vegan diet. The survey study showed that reasoned action variables explained intentions well, R2=.40 for a vegetarian diet and R2=.51 for a vegan diet. Attitude and Descriptive Norm were among the best predictors of intention to have a vegetarian or vegan diet. Twenty-four beliefs ultimately determined intention to adopt a vegetarian diet and twenty-two beliefs proved to underlie intention to adopt a vegan diet. While fifteen of these beliefs overlapped, their association with behavioral intention varied considerably in strength and different sets of beliefs predicted intention to have vegetarian/vegan diet. The results of the present research support the importance of conducting belief elicitation studies and underscore the strength of the reasoned action approach in explaining behavioral intentions. In addition, the outcomes have important practical implications concerning content decisions of interventions that encourage vegetarian and vegan diets.
References


Cross-language effects on the disambiguation of homonyms

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For English monolinguals the word spring most often refers to one of the four seasons and less often to the verb meaning to jump. Therefore, an English monolingual is more likely to initially activate the noun meaning. However, this might not be the case for Dutch/English bilinguals, because spring has a cognate translation in Dutch that can only mean to jump. Through cross-language activation, it seems possible for a subordinate meaning to become the more dominant meaning and thus change bilinguals’ concepts of words. To provide more insight in the way bilinguals conceptualize words and to learn more about the role of cross-language activation, we examined whether the first language (L1) affects homonym processing in the second language (L2).

We will conduct a cross-modal lexical-decision task using E-prime 2.0 consisting of 90 recorded primes (60 English homonyms and 30 unambiguous words) followed by visual target words (words related to the noun or verb meaning or a non-word). Thirty English monolinguals and thirty Dutch/English bilinguals will be tested.

Even though we are still collecting data, we expect to find that the meaning of the L1 word, which is either a noun or verb, will influence the availability of a particular meaning for words that are ambiguous in L2. That is, when the meaning of L1 words corresponds to the meaning of L2 words (e.g., noun meaning in L1 and noun meaning is dominant in L2), the reaction times in this category will be different from the reaction times in the category in which the meaning of L1 words do not correspond to the meaning of L2 words (e.g., verb meaning in L1 and noun meaning is dominant in L2).
The Role of Rhythm in Speech Perception. Research Proposal

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In analogy with music, the concept of rhythm is often used to describe how larger units of speech develop over time. Assuming a natural occurrence in rhythmically equal portions (isochrony), Pike (1945) proposed that each language can be categorized according to three classes: syllable-timed like English, mora-timed like Japanese, and stress-timed like Spanish. Although evidently, not every language meets this prediction (Nolan & Jeon, 2014), research on auditory rhythmic grouping (Boll-Avetisyan, Bhatara, & Höhle, 2017) suggests that music and language share cognitive networks for rhythm perception.

An alternative, non-temporal definition of rhythm was proposed by Nolan and Jeon (2014). Based on alternating units of different prominence, they emphasize structural relations and assume many dimensions apart from relative durations (e.g., pitch) as possible cues to rhythm. Since the weight assigned to each dimension varies at the levels of language and individual speaker, the question arises whether this weighting can undergo changes due to influence of later-learned language (L2). If so, phonetic accommodation among bilinguals (language-dependent increase or decrease in similarity to speech of a model or interlocutor), already found at many other language levels (Antoniou, Best, Tyler, & Kroos, 2011) should also be observed in linguistic rhythm.

My research design investigates this for a typically stress-timed first language (L1) and a typically syllable-timed L2, produced both, after a longer-term stay in an L2- and an L1-environment: Phonetically-trained listeners rate L1-Spanish and L2-English sentences on a scale between ‘stress-’ to ‘syllable-timed’.

In line with accommodation studies on other linguistic attributes (c.f., Tobin, Nam, & Fowler, under review), I expect an effect of L1-rhythm on L2, but not vice versa, in that L2-English productions approach those of Spanish, after weeks in a Spanish-speaking country. L1-Spanish productions however, should at best marginally drift into the direction of English after staying in an L2 environment.
References


Boll-Avetisyan, N., Bhatara, A., and Höhle, B. (2017). Effects of musicality on the perception of rhythmic structure in speech. Manuscript accepted for publication in Laboratory Phonology within the special collection on “Prosodic variability”.


Authorship attribution is the study of inferring the identity of an author based on text which he or she has written. It has practical uses in forensic linguistics (inferring who wrote a suicide note), and literature studies (detecting forgeries and deanonymizing authors who write under pseudonyms). Our work will investigate the use of Neural Networks to solve this challenge. We take a twofold approach: firstly, we investigate using generative language modelling using RNN-LSTMs and transfer learning, under the hypothesis that a language model trained on a specific author will perform well for unseen text of the same author. Secondly, we look at using a Siamese Neural Network architecture to learn a distance function between two texts, hypothesizing that texts written by the same author can be modelled as being ‘close’ in vector space. Finally, we will experiment with word and character embeddings and attempt to improve on the results we can achieve with shallower features. Our work brings together recent advances from image processing, speech recognition, and other areas of NLP research, especially those where data-scarcity presents an obstacle against using neural networks which normally rely on large amounts of training data.
The diachrony of case syncretism revisited

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Instances of case syncretism in a given case system are typically analysed in the literature as a deviation from an expected one-to-one relation between form and function (see, e.g. Wunderlich 2004; Corbett 2008, 2012). However, its widespread nature – case syncretism is attested in over half of languages with overt case-marking in the WALS sample (Baerman & Brown 2013) invites one to challenge the view that case syncretism is typologically surprising. I extend this line of thought to suggest that the one-to-one ‘ideal’ accepted for case systems may be hindering our understanding of case syncretism as a morphosyntactic phenomenon.

Drawing on data from multiple diachronic stages of Germanic and Slavonic languages, I demonstrate that that a one-to-one form : meaning relationship does not necessarily constitute an optimal set-up of a case system from the speakers’ perspective – while a general trend towards a somewhat ordered layout is often observed, other factors may be prioritised by speakers (Maiden 2005). With the above in mind, a fresh approach to case syncretism – one which does not assume perfect case differentiation as its gold standard – can be expected to further our understanding of case syncretism as a phenomenon. The Slavonic and Germanic languages, which over the course of their development arrive at significantly different systems, yet preserve a high number of shared patterns of syncretism, provide rich data, while the notions and tools of Canonical Typology provide a flexible analytical framework for a refinement of the existing view of case syncretism and its place in case systems of languages with overt-case marking, as demonstrated by a test application.

References


How does ageing affect articulatory coordination in simple and complex syllable onsets?

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Ageing is known to entail several physiological modifications, thus affecting motor performance, for instance by slowing-down limb movements or by reducing movement accuracy [3,6]. In speech, many studies report age-related changes, such as a slowing-down in overall speech rate [1,5]. However, results are mostly based on acoustic measures and only little is known about speech motor control in ageing adults. The present study aims to shed light on the effects of aging on the movements of the articulators in syllable production.

It has been shown in a number of studies that syllable structure is reflected in the coordination of articulatory gestures (Articulatory Phonology [2,4]). We aim to compare gestural coordination patterns of the lips and the tongue in syllables with low and high complexity, i.e. simple and complex onsets, in younger and older adults. Therefore, we recorded 4 older (70–80 years) and 4 younger speakers (20–30 years), native speakers of German with a 3D-Electromagnetic Articulograph (AG 501). Sensors were placed on upper and lower lip, tongue tip and tongue body. Speakers produced target words with simple (*lima*, *pina*, *kina*) and complex onsets (*plina*, *klima*) embedded in a carrier sentence “Er hat wieder _ gesagt” (‘He said _ again’). We identified articulatory landmarks, such as onset, maximum velocity and target for consonantial and vocalic gestures. Furthermore, we calculated lags for the coarticulatory overlap between the initial consonants with respect to the following vowel.

Our preliminary results for the coordination in simple vs complex onsets show a considerably higher variability for the production of the word initial consonants in older compared to younger speakers. In addition, the variability of gestural phasing increases in syllables with high complexity revealing an effect of aging on the realization of prosodic constituents.
References


The Zero Article in the Dialects of Groningen

Jeffrey Pheiff

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In (Dutch) Low Saxon dialects, the definite article can be omitted in non-generic nominal phrases, as can be seen in examples 1–4 (taken from Ter Laan 1953, 35). The ‘Ø’ represents the omitted definite article.

1. Ø Zun schient
   ‘The sun is shining’.
2. Ø Man het geliek
   ‘The man is right’.
3. Ø Jong het Ø bok verkòft
   ‘The boy sold the ram’.
4. Dou Ø deur dicht
   ‘Shut the door’

Although noticed for the first time at the latest by Winkler (1874) and remarked on many times over en passant, the use of a definite zero article in the dialects of Groningen has re-ceived little attention in the linguistic literature (see Oosterhof 2008 for literature). Explana-tions for the definite zero article are accordingly sparse; however, one is given in Oosterhof (2008). He argues, following Leiss (2000, 7–8), that the use of an overt definite article or de-terminer is closely related to the infor-mation structure of a sentence. The constituents in the-matic position are less likely to be realized with an overt determiner whereas constituents in rhematic position are more likely to be realized with an overt determiner because definiteness is not a given in the latter position. The contribution will present data culled from various translation tasks in the form of Wenker sentences, data from the Reeks Nederlandse Dialecten as well as from the SAND atlas to test the explanatory potential of the hypothesis.
References


Personal stories are increasingly used in health communication. Such narratives can successfully influence people’s attitudes and behavioral intentions to adopt a healthy lifestyle by transporting receivers into the story, and by fostering identification with the main character or protagonist. In two experiments we test whether we can increase transportation and identification by varying the extent to which the protagonist is similar to the participants (cf. Slater & Rouner, 2002).

In the first experiment (EXP1, N=125), we presented female students with one of three versions of a narrative fear appeal about the severe physical and personal consequences of breast cancer. At the end of the story, the reader is urged to perform monthly self-exams to detect cancer at an early stage. In one version, the protagonist was highly similar in age and lifestyle as the respondents (22-year-old female student), another version had a protagonist that was dissimilar (59-year-old working mother), and in the control version no details of age or lifestyle were given. After reading the story, participants answered questions about the level of transportation, identification, attitude, and intention to perform a monthly breast self-exam. The second experiment (EXP2, N=80) was a direct replication of the first study (with some added measures).

In EXP1, no significant differences were found between the three versions in the reported identification, transportation, attitude or intention. In EXP2, we tested whether the objective manipulations of similarity were indeed perceived as such. It turned out that participants deemed the student and the general version significantly more similar than the dissimilar working mother version. Despite this difference, there was no effect at all of version on identification or other measures. These results suggest that even though protagonists can be seen as very dissimilar, that doesn’t stop message recipients from identifying with them.
Understanding speech is rapid and effortless in optimal conditions, but noisy environments degrade the speech signal and make listeners rely more on supportive linguistic information (Mattys & Wiget, 2011). It is unclear how cochlear implant (CI) users who process a degraded signal, but also vary in speech perception outcomes, integrate acoustic and contextual information during speech processing. The present study investigates the time course of lexical competition in CI users, and how individual CI users’ ability to timely integrate contextual information relates to their reliance on lexical information.

Fifteen postlingually deafened CI users and thirteen age- and gender-matched normal-hearing listeners participated in an eye-tracking and auditory lexical-decision experiment. The processing of verb-based thematic constraints in CI users was investigated using a visual-world paradigm (Dahan & Tanenhaus, 2004; Wagner et al., 2016). The auditory lexical-decision task studied effects of lexicality, frequency, neighborhood density, and age-of-acquisition. Growth curve analysis (Mirman, 2014) was used to analyze gaze fixations. Fixation time-curves per participant were combined with their sensitivity to discriminate words from non-words, as measured in d’. In addition, linear mixed-effects models were used to investigate effects of the lexical parameters and participant groups on accuracy and reaction times (RTs).

The results demonstrate that, on average, CI users can timely integrate contextual and lexical information, but the time course of lexical competition is delayed relative to NH listeners. Individual variation among CI users was related to d’ values obtained from the lexical-decision task. CI users who showed a slower integration of contextual information were also less accurate at discriminating words from non-words. Finally, significant interactions of group and lexicality were found on accuracy and RTs. CI users had longer RTs and lower accuracy scores for non-words than words and lexical factors affected the accuracy scores and RTs of CI users differently than NH listeners.
References


In order to grow up to be successful communicators, bilingual infants must learn the rules of two linguistic systems. The rhythmic properties of each of their languages may be an important factor for bilinguals in separating their input, and acquiring two linguistic systems. In this talk, I investigate the effect of rhythmic class on the acquisition of a vowel contrast in one of the bilinguals’ languages, Dutch. Bilingual infants are able to discriminate the /i/-/ɪ/ contrast at 8–9 months (Liu & Kager, 2015). However, this research tested a heterogeneous sample when considering the infants’ other language. In order to address this issue, I focus on Dutch bilingual infants whose second language is either in the same rhythmic class (stress-based, English or German, “similar-bilinguals”), or in a different rhythmic class (syllable-based, Italian, French, or Spanish, “different-bilinguals”). There are currently two competing hypotheses on the effect of rhythmic class on bilinguals’ discrimination abilities: that learning two languages from the same class aids the acquisition of a difficult discrimination (Havy, Bouchon, & Nazzi, 2016), or that learning two languages from different classes has the same effect (Sundara & Scutellaro, 2011). Therefore, directly comparing the performance of similar- and different-bilinguals on the same contrast will help address these conflicting hypotheses, as well as inform models of perceptual reorganization (e.g. Processing Rich Information from Multidimensional Interactive Representations; Curtin, Byers-Heinlein, & Werker, 2011; Werker & Curtin, 2005, and Native Language Magnet Theory Expanded; Kuhl et al., 2008). To test the effect of rhythmic similarity on vowel perception, 8–9 month-old Dutch bilinguals and monolinguals are tested on the /i/-/ɪ/ contrast with a visual habituation paradigm.
To listen or not to listen: verbal and non-verbal displays of recipiency in meal-time conversations

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In this conversation-analytic research we analysed the ways in which family-home parents show that they are listening during tellings of the children. The main focus in this paper is on parent’s involvement in multiple activities simultaneously, namely listening and eating, which is referred to as “multiactivity”. The data are video recorded mealtime conversations in family-homes. In family-homes, children, who cannot live with their biological families anymore, are given shelter in these family homes. Concerning the development of an attachment relationship between children and their family-home parents, it is important that the children feel that they are listened to in order to get an affective and intimate relationship with the parents. The analyses have shown systematic ways in which family-home parents coordinate their involvement in the activities of listening and eating, which are (i) when parents avert their gaze from the telling child, they break the social rule which states that hearers need to look at speakers during the telling. We found that when averting their gaze, family-home parents perform “extra work” by means of head nods and linguistic means, with which they still show an orientation to the telling, even though they are not looking at the speaker; (ii) when parents are not looking at the telling child, they may also show an orientation to the telling by positioning their bodies in the direction of the child; (iii) parents combine in systematic ways the activities of listening and dinner-related activities, such as directing a fork to the mouth, with a quick glance at the speaker, which also shows an orientation to the telling. This research contributes to knowledge about interaction between children and their non-biological parents which can also contribute to knowledge about how human beings are able to coordinate multiple activities simultaneously.
The effect of the current military conflict in Ukraine on language use and language attitudes

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The language situation in Ukraine is both highly complex and politically sensitive: while Ukrainian is the official state language, Russian is the dominant language nationwide in some domains, for example in the media, but nonetheless has no official status except on a regional level. Since violent conflict erupted in 2014, the language issue in Ukraine has come to the center of attention, as the conflict is framed (amongst other things) as though it were between Russian-speaking separatists and Ukrainian-speaking troops/government.

In this presentation, the possible effects of the conflict on the language use and attitudes in Ukraine will be analyzed, drawing on Accommodation Theory (Giles 1973) and the idea of intentional language change elaborated by Thomason (2006). Data from existing sociological surveys both prior to and after 2014 will be compared to the results of an online survey to be carried out in February 2017. It is expected that data from after 2014 will point to divergence, as it is likely Ukrainians want to dissociate themselves from Russia and thus from the Russian language. This could possibly result in increased use and stronger preferences for Ukrainian. As language is a symbol of group tensions, language differences can be codified and portrayed in such a way that they create more distance and hostility between the groups that are on opposing sides of the conflict (cf. Chilton 1998). Because of the fact that Ukrainian and Russian are fairly similar, it is possible the language will be altered to create differences that were not present before, like the developments in Croatian during and after the Yugoslav war (Bugarski 2012).

References


In the English as a foreign language (EFL) classroom, little attention is paid to listening skills and production training (Van den Doel, 2006). This PhD project focuses on perception training and how it may prove beneficial to EFL students’ communication skills. The intention of this project is to find out whether perception training significantly improves students’ perception as well as students’ production skills.

The participants in this research project were Dutch students attending secondary education in 5 havo and 6 vwo classes. Five classes received training sessions and four other classes formed the control group, which consisted of students who received regular English classes without training sessions. In order to help students improve their overall English perception, 38 difficult phonemes were chosen as items to practice with during training sessions. First, a pretest was conducted. Then, the students in the test group participated in five training sessions. After this, a posttest was conducted and two months after the posttest, participants took a retention test. The tests and training sessions consisted of a forced-identification task where students heard a stimulus and had to choose one of four answers (containing one target and three foils).

Results suggest that the training sessions did improve perception and that the test group retained what was learned during training sessions over time. Results of perception training on production are unknown at the time of writing and will be revealed on the TABU Dag.

References

The evidential basis of future tense

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The lack of symmetry between future tense and futurity suggests that the former is not used merely to locate an event at a future time but critically to encode that the proposition expressed at the utterance time will be true at a subsequent time (henceforth ‘prospective reading’). In Greek prospective readings are typically associated with tha followed by [+perfective], [-past]. Paradoxically though, according to current literature (Giannakidou 2009, 2012) the semantic meaning of tha [+perfective], [-past] only encodes an open forward looking interval and therefore it is underspecified for a prospective interpretation.

In this paper, it is argued that this prospective reading is evidential in nature and it is triggered only when the speaker possesses adequate evidence about how the actual world will turn out to be in the future. What is more, it is suggested that the prospective reading arises as a generalised presumption from the lack of further specification to the lack of need for it given a mutual knowledge about how language is used.

By putting forward that evidence is what narrows down the temporal domain and triggers future prospective readings this proposal adds up to the arguments that, at least for Greek, future tense is subsumed under evidentiality. Moreover, this line of analysis may also offer an explanation for the morphological asymmetry between past and future in Greek by suggesting that the difference between past and non-past is one of time whereas the difference between non-past and future is one of evidentiality and/or modality.

References


Talking bats: how can they help us understand the neurobiology of language?

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Although humans are unique in their ability to communicate with one another through speech and language, other animals are also capable of complex vocal communications. Vocal production learning – the ability to imitate novel sounds – is a key language ability, which humans use to acquire spoken language by learning new sounds and words. Only a handful of animals share this ability to imitate novel sounds with humans, namely whales, dolphins, seals, elephants, and some bird and bat species. By studying their ability to imitate novel sounds on a neurogenetic level, we can unravel the biological and evolutionary basis of language (Vernes, 2016). Currently, we are in the process of identifying areas in the bat brain involved in vocal production learning by studying gene expression patterns. Although each cell in an animal’s body contains the same set of genes, not all genes are active in each cell. Gene expression patterns can thus inform us about which genes are active in which brain areas. By looking at where genes associated with language and vocal production learning are active, we can discover areas in the bat brain involved in vocal production learning. FOXP2, ROBO1, and SLIT1 are three genes that have previously been linked to language (disorders) in humans and vocal production learning in birds (e.g., Lai et al., 2001; Wang et al., 2015). In the present study, we are therefore exploring the gene expression patterns of these three genes in the bat brain. In doing so, we aim to acquire new insights into the neurogenetic basis of vocal production learning in bats. This will hopefully contribute to a better understanding of the neurobiological basis of vocal production learning in both bats and humans.

References


Sensitivity to different types of cues to identify generics in aphasia

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Distinction between generic and nongeneric interpretation seems very important for everyday speech. For this purpose, English speakers rely on three types of cues – morphosyntactic, contextual and world knowledge (Gelman and Raman, 2003). However, it is still not clear whether people with language disorders use the same cues.

The present study tests the findings of Gelman and Raman (2003) and Cimpian, Meltzer and Markman (2011) for two Russian speaking populations: healthy adults and adults with aphasia. Both groups of participants were shown pictures with animals that have unusual visual features and then asked questions about these animals (i.e., Это верблюд. У верблюдов зеленый горб? ‘Here is a camel. Do camels have green hump?’). In half of the stimuli the number of creatures in the picture mismatched with the number of the noun in the question, which should force generic interpretation. We found that healthy adults are sensitive to switching of morphosyntactic cues: in the mismatch condition, they interpret the question generically (62% generic interpretations in mismatch conditions and 28% in match conditions). Patients chose generic interpretation regardless conditions (74% of generic interpretations in match conditions and 75% – in mismatch conditions).

We suppose that participants with aphasia ignored contextual and morphosyntactic cues and relied mostly on their word knowledge.

References
The Parallel Meaning Bank (PMB) is a corpus of translations annotated with shared, formal meaning representations comprising over 11 million words divided over four languages (English, German, Italian, and Dutch). These language-neutral annotations are produced using statistical models trained in a semi-supervised manner (Abzianidze et al., 2017).

Here I focus on its semantics, based on the Discourse Representation Theory (DRT, Kamp and Reyle, 1993) format. This includes a semantic account for Tense and Aspect as an optional layer provided to the final user.

Although there is such a treatment in the original DRT, the PMB is built upon a compositional interface from Combinatory Categorial Grammar (CCG, Steedman, 2001) syntax into lambda-DRT semantics, a combination of simply typed lambda-calculus (Barendregt et al., 1984) and DRT. Hence, I propound a compatible way to also interface the English tenses and aspects.

The Tense requires to introduce a temporal relation between the event time and utterance time (Reichenbach, 1947). The latter is depicted as an indexical constant. I split a tensed verb into its temporal property carried out by the suitable auxiliary verb (did, do(es), will) and its proper basic semantics from the untensed backbone of the PMB carried out by its infinitive form.

As for the Aspect, there are two sorts in English and can be combined in all possible ways with any tense: simple, progressive, perfect, perfect progressive. Their effects depend on the Aktionsarten: activity, accomplishment, achievement, state (Vendler, 1957). Indeed, the Aspect changes a verb Aktionsart. Furthermore, this verb-phrase-specific feature is moving according the complements (Moens and Steedman, 1988); increasing the task complexity. I opt for a knowledge-based approach that will adapt the nucleus of eventualities in a post-processing.

The present work is still an ongoing research, prone to improvements. The next step is obviously to extent the interface to the specificities of the three other
languages. Also, I want to conduct a corpus-based study on the translations of mood-tense-aspect combinations thank to the PMB.

References


The Processing of Relative Clauses in Persian and English: An eye-tracking and Self-paced Reading Study

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Due to distinctive cross-linguistic differences between English and Persian languages, such as the direction of writing and syntax, and semantics, Persian EFL learners encounter some difficulties while processing reading for comprehension. The present research is a first attempt to track Persian EFL students’ eye movements while reading texts to examine the effects of visual characteristics of Persian and English orthography on their reading behavior and to investigate the potential difficulties of Persian EFL learners while processing the English and Persian relative clauses (RCs) during sentence comprehension tasks. Eye-tracking methodology and self-paced reading paradigm will be applied in this experiment. A total 32 sets of four types of relative clauses were constructed and translated into the Persian language. In order to make sure the processing difference between the object and subject extracted versions of relative clauses are not because of any plausibility differences and to judge the naturalness of the materials for both experiments, a plausibility survey test was conducted. Based on storage and perspective shift hypotheses, it is speculated that the processing of object-modifier, subject-extracted relative clause (OS) might be the easiest one for the Persian EFL learners. It is expected that the processing of SO(subject-modifier, object-extracted) and OO(object-modifier, object-extracted)RC types in English will be harder for Persian students since they will search an object in the relativized clauses because of the presence of a resumptive pronoun in sentences with an object of a preposition in the Persian language.
The English swear word *fuck* has been borrowed into many languages, its frequency perhaps helped by the fact that non-native swear words typically have a lower taboo value than native swears (Harris et al. 2003). However, the vowel /ʌ/ (STRUT) is uncommon cross-linguistically so the loan requires adaptation into the receiving language (Van Coetsem 1988).

The STRUT vowel in borrowings into Dutch may be produced as /ɔ/ or /ʏ/ (as in the loan cover, e.g. Smakman & de France 2014); for *fuck* in particular, adaptation to /ɑ/ or adoption of original /ʌ/ are also possible. Informal observation suggests different pronunciations of *fuck* (different adaptation strategies) are linked to social types and stances (cf. also Babel 2016), but also that different forms of the word *fuck* may be pronounced differently by the same speaker.

As a first step towards untangling the sociolinguistic and stylistic constraints on variation in adaptation strategies for *fuck* in Dutch, we present results from a broad Labov-style department store survey. Data was elicited from speakers in the Groningen HEMA. Participants were asked to read out sentences with swear words; the vowel in each swear word was asterisked out (f*ck) so as not to prime vowel production. They were then asked to rate the severity of the swear word; the actual purpose of the research was not disclosed until afterwards.

A number of social factors appear significant:

- **Age:** younger speakers use more /ɑ/, older speakers use more /ʏ/;
- **Gender:** women show more variation, while men stick to the age pattern;
- **Attitude to swearing:** speakers with a negative attitude to swearing use more /ʏ/ than more regular swear word users;
- **Word form:** different forms of the word (*fuck, what the fuck, fucking, fucked up,* and the verb *fucken*) show different patterns, with significant intra-speaker variation.
Age of acquisition effects in electrophysiological signatures of second language grammar processing: a linear mixed effects regression and generalized additive mixed modelling comparison

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Studies on the impact of age of acquisition (AoA) on second language (L2) grammar processing generally predict two possible outcomes of the relationship (Birdsong, 2005). The development of the ability to learn an L2 across the lifespan is expected to be continuously decreasing when caused by general changes in cognitive abilities. The development is expected to be discontinuous in order to qualify as evidence for a critical period for L2 acquisition. In electrophysiological studies on language processing scholars commonly use statistical approaches which assume a linear relationship between event-related potential (ERP) amplitudes/latencies and a dependent variable (e.g., linear mixed effect regression modelling, LMER). When assuming only linear relationships the latter expected non-linear relationship might be missed or underestimated by the analysis. In this study we investigate the effect of AoA on electrophysiological signatures in L2 processing of tense marking using a fairly new approach, generalized additive mixed modeling (GAMM; Wood, 2006), which can also account for non-linear relationships.

ERPs were recorded while later L2 learners listened to Dutch sentences that were either well-formed or included a tense marking violation. We analyzed the impact of AoA on the size of the P600 effect, which was taken as an indicator of native-like processing. LMER and GAMM analyses were performed and compared.

Whereas all L2 learners show a P600 effect in response to the tense marking violations there is an additional linear relationship between AoA and the size of the P600 effect. Learners with higher AoA show a smaller P600 effect.

Tense marking seems a relative simple feature for later L2 learners to acquire. However, the results still show clear effects of AoA. Furthermore, the study stresses the importance of extending our analyses to non-linear relationships to be able to
make fair inferences about the relationship between AoA effect and L2 grammar processing.

References
Semi-automated lexical tests of Alzheimer’s narrative speech

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Lexical attrition is a pervasive feature of Alzheimer’s disease (Pekkala et al., 2013), yet no standardised assessment tool is currently available for its detection (Forbes-McKay & Venneri, 2005). Previous studies reported that Alzheimer’s narrative speech is characterized by decreased specificity and increased redundancy (Giles et al., 1996).

In the present study, we tested the effectiveness of a novel lexical analysis technique on a corpus of Alzheimer’s narrative speech. Our technique merged the classical manual analysis in clinical linguistics (Croisele et al., 1996) and exploratory methods from the field of computational linguistics (Thomas et al., 2005), resulting in a semi-automated lexical analysis of Alzheimer’s narrative speech. Our main research question asked whether semi-automated lexical tests succeed in discriminating between Alzheimer’s and healthy controls’ narratives. Three lexical subcategories were examined: Closed-class words, Specific open-class words and Repetitions. Our predictions were that the disrupted lexical access of Alzheimer’s patients would result in a measurable imbalance of closed vs. open class words, accompanied by an increase of repetitions.

To test our hypothesis, we selected 40 Probable Alzheimer’s and 40 control participant samples of a picture description task from DementiaBank (Becker et al., 1994). As predicted, U test and Principal Component Analysis revealed an interaction between group type and frequencies of specific categories. The lexical profile of Alzheimer’s patients is characterized by elevated presence of Closed-class words, paired with paucity of Specific open-class words and a significant increase of Repetitions.

We argue that semi-automated lexical tests may constitute the first step towards a design of an objective assessment tool of Alzheimer’s patients. In the exploratory section of the research, our results were compared to a previous study on Semantic dementia (Garrard & Forsyth, 2010), which yielded insights into both shared and dissimilar patterns of lexical attrition of the two pathologies.
References


Is that about not being rude? Politeness issues in second language acquisition

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The concept of politeness is one of those popular terms that invoke many common beliefs and considerations but can hardly fit in one paradigm of scientific research. While there is still a hot debate on how to “teach to speak correctly” in terms of grammar knowledge less work has been done recently on how to “teach to speak politely” in terms of efficient face work and conversational needs.

The aim of this presentation is to focus attention on the recent postmodern studies on politeness which promote holistic interpretation of the rapport management (Spencer-Oatey 2000). On the one hand, this view on the concept surpasses folk interpretations of politeness as intentional avoidance of impoliteness. On the other hand, a subsequent shift to the fluid concept of appropriateness which can be negotiated and contested in an ongoing conversation leaves very little space for a teaching practice (Bella, Sifianou, Tzanne 2015).

The proposal for a teaching unit is based on the belief that a guided discovery of learners’ interpretations can enhance identification, explanation and implementation of sociopragmatic rules. Although the analysis of variable features is a mostly subconscious process, the attention at differences in the linguistic expression of social relations can raise pragmatic awareness (Bou-Franch, Garces-Conejos 2003).

The empirical data for this research is provided by the analysis of Discourse Completion Tasks designed for Russian and Italian speakers and administered at the Linguistic Center of the University of Padua.

References


Can Salience be Measured in Pupil Size?

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Certain aspects of language stand out more than others. Scholars have suggested that this prominence, termed linguistic salience, plays a role for processes of language change (Kerswill & Williams 2002) as well as for second language acquisition (Smith 2012) in that salient forms are e.g. more likely to undergo change, or are often acquired earlier than other features. Yet, what makes a linguistic feature salient is a contested issue: some argue that salience can be defined by linguistic traits such as loudness, high word-frequency, or a large articulatory effort, whereas others argue that salience is created by association with social factors (cf. Kerswill & Williams, 2002).

While an exact and univocal definition of the concept of saliency is currently lacking, recent technological advances allow for exploring the potential relationship between salience and cognition. While these advances cannot answer univocally the question of what salience is, the possibility of having a numeric measure of salience can bring us closer to measuring its relationship with linguistic and social factors.

We suggest that auditory salience is related to dilation in pupil size, which in turn reflects cognitive load or mental effort. The present study examines participants’ pupil sizes while listening to stimuli in which various linguistic categories are manipulated to containing salient and non-salient equivalent variants (e.g. high intensity recordings vs. low intensity recordings, recordings with high-frequency words vs. low-frequency words). Based on Johansson & Balkenius (2017), we hypothesize that salient forms elicit an increase in pupil diameter of about 0.5 mm as compared to non-salient equivalents, reflecting increased cognitive load. To account for variations on an individual level, all participants are interviewed after the eye-tracking experiment.

References

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