

Annual report 2016 of ACLC research group: *Grammar and Cognition*

Coordinators: Judith Rispens & Jan Don

Web page: [Grammar and Cognition](#)

Current external funding:

- Judith Rispens: NWO Vidi 'Examining the role of procedural learning in developmental disorders' (800.000 €)
- Judith Rispens: NRO PRO: ORWELL project (with Patrick Snellings; Jurgen Tijms and Maurits van der Molen UvA). 800.000 €
- Frank Seifart: Volkswagen Stipend
- Roland Pfau: NWO Vrije Competitie 'Argument structure in three sign languages: typological and theoretical aspects' (with Vadim Kimmelman, Vanja de Lint, Marloes Oomen UvA). 725.000 €
- Roland Pfau: Horizon 2020 Reflective Societies SIGNHUB (with 9 European partners and with Ulrika Klomp UvA) 219.000 €
- Natalia Rivera: Government of Chile, CONICYT scholarship, 104.000 €

Participants in 2016:

Faculty

- [Suzanne Aalberse](#) (ACLC), senior researcher
- [Enoch Aboh](#) (ACLC), senior researcher
- [Anne Baker](#) (ACLC), senior researcher
- [Hans Bennis](#) (ACLC, Meertens), senior researcher
- [Beppie van den Boogaerde](#) (ACLC), senior researcher
- [Laura Bos](#) (ACLC), senior researcher
- [Robert Cloutier](#) (ACLC), senior researcher
- [Jan Don](#) (ACLC), senior researcher, coordinator
- [Aafke Hulk](#) (ACLC), senior researcher
- [Jan de Jong](#) (ACLC), senior researcher
- [Olaf Koeneman](#) (ACLC), senior external researcher
- [Michiel van Lambalgen](#) (ILLC), senior researcher
- [Dana Niculescu](#) (ACLC), senior researcher
- [Roland Pfau](#) (ACLC), senior researcher
- [Judith Rispens](#) (ACLC), senior researcher, coordinator
- [Frank Seifart](#) (ACLC), senior researcher
- [Jeannette Schaeffer](#) (ACLC), senior researcher
- [Petra Sleeman](#) (ACLC), senior researcher

- Arjen Versloot (ACLC) senior researcher
- Fred Weerman (ACLC), senior researcher
- Hedde Zeijlstra (ACLC), senior external researcher

Postdocs

- Margriet Heim (ACLC), external researcher, project: *Improving communication between non-speaking people with a multiple handicap and their social network*
- Kino Jansonius, (external researcher)
- project: *Dutch norms for the Renfrew Language Scales.*
- Margreet van Koert (ACLC), postdoc (FGW/FMG), project: *Improving English at school.*

Current Ph.D projects

- Brechje van Osch, Rosalinde Stadt, Sanne Berends, Nika Stefan: *Linguistics in a multilingual setting.*
- Caitlin Meyer, Imme Lammertink, Merel van Witteloostuijn, Tiffany Boersma, Evelyn Bosma, Iris Duinmeijer, Natalia Rivera, Sybrein Spit: *Linguistics and cognitive capacities.*
- Margot Kraaikamp, Sune Gregersen, Jelke Bloem, Anne Merkuur: *Language Change and variation*
- Hernan Labbe Grunberg, Tiffany Boersma: *Morphology*

Description of the research group:

- This research group focuses on grammatical knowledge as part of the general cognitive system. How do general cognitive processes shape and constrain grammar and what can we infer on the basis of our internal and external knowledge of grammar about the role language as a cognitive domain? In particular, the research groups focuses on language acquisition, language change, language variation and executive functioning and the way these aspects interact.

Research highlights in 2016:

- **Suzanne Aalberse**, Yiwen Zou and Sible Andringa found that Mandarin speakers in the Netherlands (first generation migrants and heritage speakers) are significantly more likely to encode definiteness overtly than speakers in China. Moreover they found that second generation speakers in the Netherlands have a preference for the distal pronoun when referring to already mentioned nouns. This preference for the distal is in line with preferences in Dutch.
- PhD candidate **Jelke Bloem** found that the two orders in which Dutch verb clusters can be expressed differ in the uniformity of their information density, and suggested that the order with more uniform information density may be easier to process.
- **Tiffany Boersma** discovered in her research project on the acquisition of morphophonology in typically developing children and children with developmental dyslexia that both phonological processing skills and vocabulary size in 5;0 – 10;0 year old typically developing children is associated with their production and

judgement of the Dutch past tense and diminutive. In addition, no significant difference on the same production and judgement tasks between the typically developing children and children with developmental dyslexia were apparent.

- Closely related language such as Frisian and Dutch share cross-linguistic phonological regularities. An example of such a regularity is Frisian *-ân* [ɔ:n] and Dutch *-and* [ant], as in the cognate pairs *hân* [hɔ:n] - *hand* [hant] 'hand' and *lân* [lɔ:n] - *land* [lant] 'country'. **Evelyn Bosma** discovered that bilingual children learn these regularities as they grow older and that this learning is related to verbal working memory.
- **Jan Don** and Van Baal discovered in a typological study comprising 50 languages that possessives are built from accusative forms of pronouns.
- **Margreet van Koert** found that English-Dutch bilingual children (6;0 – 10;0) differ in their quantifier interpretation preferences from monolingual English children but also from monolingual Dutch children. A quantified noun phrase antecedent, such as *every kangaroo*, is understood as distributive by monolingual Dutch children and as more collective by monolingual English children. English-Dutch bilingual children, on the other hand, are somewhere in between the distributive and collective interpretations. Consequently, their interpretation of object pronouns and object reflexives is different from monolinguals, too.
- Researcher **Hernan Labbe Grunberg** found that a known electrophysiological response can be used as a measure of the strength of the memory traces of individual lexical items in memory. This constitutes an objective, personalized measure of word frequency for any given person. Additionally, through a modulation of the same electrophysiological response, we can investigate whether polymorphemic words are stored in lexical memory as a single unit or as combinations of individual morphemes.
- Ph.D. candidate **Caitlin Meyer** discovered that American English speaking three-to-five-year-olds use the morphological structure of ordinal numerals to acquire their meaning, and that (just as in Dutch) irregular ordinals (*derde* and *third*) are more difficult than regular ones (*vierde* and *fourth*).
- **Dana Niculescu** investigated the Syntax of Old Romanian. While the old Romanian gerund shares many characteristics with the modern Romanian gerund, it has a number of specific syntactic features in old Romanian, such as: (a) a stronger verbal character, as it can be the predicate of the clause and (b) the possibility to occur in complement position in more configurations than in the contemporary language, thus sharing more contexts with the infinitive. Furthermore, all pronominal clitics are verbal in old Romanian, although the adjacency between pronominal clitics and the verb was not yet general; the most striking difference with modern Romanian is the greater extent of pronominal enclisis. Finally, there is a greater variety of syntactic positions with internal realization than in modern Romanian.
- **Brechje van Osch** found that heritage speakers and L2 speakers of Spanish with similar proficiency levels have different types of knowledge about Spanish

subjunctive: while heritage speakers are more native-like on a task that taps into implicit knowledge, L2 speakers outperform heritage speakers in a more explicit task. This provides evidence for the claim that late L2 acquisition results in more explicit knowledge than early bilingual acquisition.

- In a commentary on a target article on grammatically complex utterances produced by bimodal bilinguals (simultaneous combination of spoken and sign language), **Roland Pfau** shows that these utterances share interesting properties with spontaneous speech errors produced by unimodal speakers, such as word blends in which two roots share a terminal node.
- **Imme Lammertink, Merel van Wittloostuijn and Judith Rispens** demonstrated that implicit statistical learning (nonadjacent dependency learning and visual statistical learning) can be tracked online using reaction time measures and that these online learning measures do not necessarily correlate with offline judgement tasks.
- Researcher **Schaeffer** showed that the language and cognitive impairments in children with High-Functioning Autism (HFA) and children with Specific Language Impairment (SLI) differ: children with HFA have pragmatic impairments but are grammatically and cognitively typical, while children with SLI show weaknesses in pragmatics, grammar, and extra-linguistic cognition, in particular, working memory.
- **Arjen Versloot** worked (with Michiel de Vaan, Lausanne) on a historical reconstruction of Proto-Frisian, revealing many details about the chronology of changes in the West Germanic languages in the period between 400 and 800. A remarkable finding was the fact that Frisian retained an instrumental and a locative case for a long time beyond the year 800, up till the early 13th century.

Valorisation:

- Two researchers (Don, Aalberse) went to schools to talk about linguistics.
- Meyer participated in the DONGO-festival (“Eerste, tweede, derde heb je niet zo een-twee-drie onder de knie.” DRONGO Live Science Lab. Jaarbeurs, Utrecht. September 30 & October 1, 2016.).
- Some researchers wrote publications for a non-scientific audience
 - Bosma: <https://deayotun.wordpress.com/2016/11/15/han-hand-strand-over-de-verwerving-van-friese-woorden-die-op-het-nederlands-lijken/>
 - Meyer; Tellen met taal. Interview by Sterre Leufkens & Marten van der Meulen in popular-scientific magazine Onze Taal. Issue: April 2016).
 - Rispens and Schaeffer gave practical workshops to speech and language therapists (Royal Auris and Simea).