ANNUAL REPORT 2016
Center for Language and Cognition Groningen
Foreword

On behalf of the Center for Language and Cognition Groningen (CLCG), we are pleased to present the 2016 Annual Report. The research institute CLCG is home to all the linguistic research carried out within the Faculty of Arts of the University of Groningen. The CLCG is a research institute within the Faculty of Arts of the University of Groningen. The CLCG continued its research into 2016 and this report summarizes the institute’s activities during the year.

A substantial appendix, including a full list of publications of all CLCG staff members in 2016, their lectures and other academic and professional activities, may be found on the institute’s website, http://www.UG.nl/research/clcg/ (see the section on “Annual Reports”). This is the last annual report under my directorship. I wish my successor as of 2017, Prof. Gertjan van Noord, good luck as the new director of CLCG.

Petra Hendriks

Prof. Petra Hendriks, Director CLCG

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1 ABOUT CLCG

Mission
The mission of CLCG is to conduct and support high-quality linguistic research and disseminate the results of this research to the international scientific community and to society at large. Research in CLCG focuses on the dynamics of language. From a variety of monodisciplinary and multidisciplinary perspectives, CLCG studies computational processing of language, processes in discourse and communication, neurolinguistic processing and language development across the lifespan, and variation and change in linguistic structure and meaning. The aim is to uncover the processes that underlie the use of language in individuals and society.

CLCG aims to realise these goals by setting the following priorities:
• CLCG actively contributes to the University of Groningen’s societal themes (Energy, Healthy Ageing and Sustainable Society). In particular, CLCG contributes to the theme of Healthy Ageing with its research on typical and atypical language development and use across the lifespan and health communication, and to the theme of Sustainable Society with its research on multilingualism, mutual understandability between languages, literacy development and language teaching.
• CLCG fosters interdisciplinary approaches to the study of language. The contribution of CLCG to the cognitive neurosciences is reflected in the affiliation of several CLCG members with the Research School of Behavioural and Cognitive Neurosciences (BCN).
• Linguistic research in CLCG is closely connected to the instructional needs of the faculty, e.g., in the languages spoken in modern Europe.
• CLCG has a special responsibility for the Dutch languages and dialects, especially those spoken in the northern Netherlands (Dutch, Frisian and Lower Saxon, including Grunnings).

Research integrity & governance
The quality of research conducted at the University of Groningen (UG) is assessed against the highest international standards. In addition, the University complies with the behavioural rules drawn up by the Association of Universities in the Netherlands (VSNU: Vereniging van Universiteiten), which can be found in the Dutch Code of Conduct for Scientific Practice. Important values in this code of conduct include care, reliability, verifiability and independence. The University of Groningen also has its own regulations for the protection of academic integrity, describing which actions must be taken in the event that academic norms are violated.

Shared responsibility
All those involved in teaching and research at the University of Groningen are jointly responsible for preventing and identifying academic misbehaviour. Upon being appointed, researchers declare that they are familiar with the Dutch Code of Conduct for Academic Practice and will obey it. Research integrity is a regular part of the assessment interviews with PhD’s especially in the first year progress assessment interview.

Ethical Committee
Linguistic research involving human participants is reviewed by the Ethical Review Committee (Commissie Ethische Toetsing Onderzoek, or CETO) of the Faculty of Arts, the Faculty of Philosophy and the Faculty of Theology and Religious Studies. The Ethical Review Committee was appointed in 2015 to ensure that the ethical rules governing the conduct of research with human participants are adhered to. Linguistic research that is medical in nature (e.g., involving patients) or uses an invasive research method (such as fMRI or TMS) is subject to approval by the Medical Ethical Committee of the UMCG (Medisch Ethische Toetsingscommissie, or METc). All other linguistic research (including research involving EEG methodology, adults with aphasia or children
with autism) can be assessed by the Ethical Review Committee. Currently, only research grant proposals which raise potential ethical issues and intended studies that require approval of the local ethics committee by editorial boards of journals are assessed by the Ethical Review Committee. In the future, given sufficient financial resources, the scope of the Ethical Review Committee could be broadened to include all research of staff and PhD candidates involving human participants.

Research data management
Data management is high on the agenda of the University of Groningen. The University Board has requested all SEP institutes to prepare a Research Data Management Plan (RDMP) for their institute. Within the Faculty of Arts, a Research Data Management Committee has been installed in 2015 to look into current practices, advise the Faculty Board on a policy regarding the storage and management of research data, and advise the directors of the research institutes in their task to develop and implement a RDMP. In addition, data management is discussed by the director of CLCG in the first-year interviews with PhD candidates and their supervisors.

Organisation of the institute
Director
Prof. P. Hendriks

CLCG consists of four Research Groups, organized by subdiscipline:
- Computational Linguistics
- Discourse and Communication
- Neurolinguistics and Language Development
- Theoretical and Empirical Linguistics

Coordinators of the Research Groups
Prof. G.J. van Noord (Computational Linguistics)
Prof. J.C.J. Hoeks (Discourse and Communication)
Prof. B.A.M. Maassen (Neurolinguistics and Language Development)
Dr. M. de Vries (Theoretical and Empirical Linguistics)

Advisory Board
Prof. Roelien Bastiaanse, Prof. Johan Bos, Prof. Kees de Glopper (chair), Prof. Jack Hoeksema, Prof. John Hoeks, Prof. Carel Jansen, Prof. Tom Koole, Dr. Wander Lowie, Prof. Ben Maassen, Prof. John Nerbonne, Prof. Gertjan van Noord, Joëlle Ooms (PhD-Council representative), Prof. Gisela Redeker, Prof. Siemon Reker, Prof. Marjolein Verspoor, Dr. Mark de Vries, Prof. Gerry Wakker, Prof. Jan-Wouter Zwart

Staff

Staff composition - position

<table>
<thead>
<tr>
<th>Position</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full professor</td>
<td>17</td>
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<tr>
<td>Associate prof</td>
<td>11</td>
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<tr>
<td>Assistant prof</td>
<td>29</td>
</tr>
<tr>
<td>Postdoc</td>
<td>7</td>
</tr>
<tr>
<td>PhD student</td>
<td>80</td>
</tr>
<tr>
<td>Total</td>
<td>144</td>
</tr>
</tbody>
</table>

Staff composition – position/gender

<table>
<thead>
<tr>
<th>Position</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full professor</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Associate prof</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Assistant prof</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Postdoc</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>PhD student</td>
<td>28</td>
<td>52</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>81</td>
</tr>
</tbody>
</table>

Staff composition

- **Full professor**: 17
- **Associate professor**: 11
- **Assistant professor**: 29
- **Postdoc**: 7
- **PhD student**: 80
- **Total**: 144

Staff composition – position/gender

- **Full professor**: Male 11, Female 6
- **Associate professor**: Male 8, Female 3
- **Assistant professor**: Male 3, Female 16
- **Postdoc**: Male 3, Female 4
- **PhD student**: Male 28, Female 52
- **Total**: Male 52, Female 81
PhD programme
Within the UG, CLCG participates in the Graduate school for Humanities (GSH). Formally the GSH is responsible for recruiting and selecting graduate students, for assigning them to supervisors, and for monitoring their progress toward the PhD degree. Nevertheless, CLCG members are involved in all of these processes. The director of CLCG carries out the first year assessment interviews on behalf of the GSH.

CLCG is also affiliated with various research schools. Many CLCG PhD students participate in Groningen’s Research School of Behavioral and Cognitive Neurosciences (BCN), a local interdisciplinary research school that brings together research from five different faculties of the University of Groningen. Likewise, many of CLCG PhD students choose to participate in the national graduate school in linguistics, LOT (Landelijke Onderzoeksschool Taalwetenschap). One of the major tasks of BCN and LOT is offering training courses to PhD students. Various PhD students attend courses that are organized by BCN and LOT, while some senior CLCG researchers teach such courses.

We hope to continue to serve as an excellent training center for students interested in research careers. In 2016, thirteen PhD projects were defended. A list of CLCG PhD students, together with the source of funding for their project and the title of their project can be found on the CLCG website.
Externally funded projects/ grants
8 ongoing externally funded projects continued, 6 projects were completed, and 5 projects were initiated in 2016:

<table>
<thead>
<tr>
<th>Title</th>
<th>Grant</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>The age effect in bilingual development (Monika Schmid)</td>
<td>NWO-VICI</td>
<td>2010-2016</td>
</tr>
<tr>
<td>INCPAR (Incomplete Parenthesis) (Mark de Vries)</td>
<td>ERC-Starting Grant</td>
<td>2010-2016</td>
</tr>
<tr>
<td>Neurolinguistic profiles of developmental dyslexia in a longitudinal perspective (Ben Maassen)</td>
<td>NWO-Open Competition</td>
<td>2011-2018</td>
</tr>
<tr>
<td>IDEALAB International Doctorate in Experimental Approaches to Language and Brain (Roelien Bastiaanse)</td>
<td>EU-EACEA</td>
<td>2011-2019</td>
</tr>
<tr>
<td>Mutual intelligibility of closely related languages in Europe (Charlotte Gooskens)</td>
<td>NWO-Open Competition</td>
<td>2011-2016</td>
</tr>
<tr>
<td>Literate: Early identification and prevention of reading problems in alphabetic and semanto-phonetic writing environments (Ben Maassen)</td>
<td>Marie Curie EU (IRSES)</td>
<td>2013-2017</td>
</tr>
<tr>
<td>Improving speech learning models and English pronunciation with articulography (Martijn Wieling)</td>
<td>NWO-VENI</td>
<td>2013-2017</td>
</tr>
<tr>
<td>QtLeap (Gertjan van Noord)</td>
<td>EU FP7-ICT</td>
<td>2013-2016</td>
</tr>
<tr>
<td>Effectiveness of explicit vs. implicit L2 instruction (Kees de Bot)</td>
<td>NWO-DG</td>
<td>2013-2018</td>
</tr>
<tr>
<td>A Crosslinguistic Perspective on Children’s Acquisition of Grammar Meaning Interface (Angeliek van Hout)</td>
<td>Van Gogh Program</td>
<td>2014-2016</td>
</tr>
<tr>
<td>Grasping Meaning across Languages and Learners (GramALL) (Angeliek van Hout)</td>
<td>NWO- Int. in the Hum.</td>
<td>2014-2017</td>
</tr>
<tr>
<td>Frontiers of Language Variety (John Nerbonne)</td>
<td>NWO- Int. in the Hum.</td>
<td>2014-2016</td>
</tr>
<tr>
<td>Parsing Algorithms for Uncertain Input (Gertjan van Noord)</td>
<td>Nuance Foundation</td>
<td>2014-2018</td>
</tr>
<tr>
<td>Lost in Translation – Found in Meaning (Johan Bos)</td>
<td>NWO-VICI</td>
<td>2015-2020</td>
</tr>
<tr>
<td>Acting individually or together? An investigation of children’s development of distributivity (Petra Hendriks)</td>
<td>NWO-DG</td>
<td>2016-2020</td>
</tr>
<tr>
<td>Idioms in the ageing brain: The effects of age-related cognitive decline on the processing and comprehension of idioms (Petra Hendriks)</td>
<td>NWO-DG</td>
<td>2016-2020</td>
</tr>
<tr>
<td>Learning language from expectations (Jacolien van Rij)</td>
<td>NWO-VENI</td>
<td>2016-2020</td>
</tr>
<tr>
<td>The Language of Fiction and Imagination (Emar Maier)</td>
<td>NWO-VIDI</td>
<td>2016-2021</td>
</tr>
<tr>
<td>Schrijfvaardigheid in ontwikkeling binnen het Hofstad Lyceum (Kees de Glopper)</td>
<td>NRO Kennisrotonde</td>
<td>2016-2017</td>
</tr>
</tbody>
</table>

CLCG Research output – overview

<table>
<thead>
<tr>
<th>CLCG research output 2016</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal article</td>
<td>61</td>
</tr>
<tr>
<td>Book chapter</td>
<td>19</td>
</tr>
<tr>
<td>Conference proceeding</td>
<td>25</td>
</tr>
<tr>
<td>Book</td>
<td>1</td>
</tr>
<tr>
<td>Non-refereed publication</td>
<td>1</td>
</tr>
<tr>
<td>Review</td>
<td>1</td>
</tr>
<tr>
<td>Edited journal</td>
<td>0</td>
</tr>
<tr>
<td>Edited book</td>
<td>4</td>
</tr>
<tr>
<td>Doctoral thesis</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>125</strong></td>
</tr>
</tbody>
</table>
2 Research within CLCG

Computational Linguistics

Staff Members:
Gertjan van Noord (coordinator), Johan Bos, Leonie Bosveld-de Smet, Kilian Evang, Gosse Bouma, Charlotte Gooskens, Gregory Mills, John Nerbonne, Malvina Nissim, Barbara Plank, Antonio Toral Ruiz, Martijn Wieling

Postdocs:
Lasha Abzianidze

PhD Candidates:
Johannes Bjerva, Kilian Evang, Jelena Golubovic, Rob van der Goot, Hessel Haagsma, Franz Manni (extern), Rik van Noord, Dieke Oele, Simon Suster, Femke Swarte, Stefanie Voigt.

Research focus areas
The computational linguistics group focuses on language processing by computer, both from a theoretical, experimental and applied perspective. Important research areas include computational dialectology, computational syntax and semantics, and language technology applied to Dutch.

In the last decade, research in computational dialectology has been an important focus of the group, with NWO-funded research projects of John Nerbonne, Wilbert Heeringa, Charlotte Gooskens and most recently Martijn Wieling (VENI project).

Research in computational syntax has been a further important focus, with NWO-funded research projects of van Noord and Bouma, several NWO Stevin projects and a number of smaller scale CLARIN projects. As a result, tools (parser and generator) and resources (annotated treebanks) have been developed for Dutch which are widely used by researchers around the globe.

A third important focus of the research group is computational semantics, initiated by Endowed Chair Johan Bos. The Groningen Meaning Bank is a free semantically annotated corpus and related set of tools developed by members of the CL group. The tools include Wordrobe, a collection of linguistic games with a purpose: www.wordrobe.org. Those games are played by non-scientists, who produce as a side-effect useful data annotation, i.e., crowd-sourcing in an entertaining fashion with obvious links to citizen science.

Highlights 2016

Grants and Awards

European Young Researchers’ Award
Martijn Wieling won the EYRA 2016 (European Young Researchers’ Award). The price is dedicated to post-doctoral fellows, who have demonstrated outstanding research performance and leadership and have incorporated a clear European dimension into their research. (http://www.euroscience.org/news/european-young-researchers-award-eyra-2016/)

Along with this price, Martijn was awarded a Jonge Akademie project grant for the creation and publication of a comic to illustrate one of the results of his articulography research to the general public.

Best Paper Award
Barbara Plank won the Best Paper Award with her paper "Keystroke dynamics as signal for shallow syntactic parsing" at the 26th International Conference on Computational Linguistics (COLING) 2016 in Osaka, Japan.

Nvidia Academic Hardware Grant
Barbara Plank and Martijn Wieling were both awarded a ‘Nvidia Academic Hardware Grant’ in the form of a Nvidia Titan X GPU graphics card.
**Digital Humanities Exploratory Projects Grant**

Martijn Wieling received a Digital Humanities Exploratory Project Grant from the University of Groningen for his project “Identifying Dutch Accents Automatically.”

**Young Academy of Groningen**

On Monday July 4, 2016, the Young Academy of Groningen was launched. The academy consists of a group of 17 enthusiastic top young researchers who, in addition to their research programs, are driven by an interest in the broader aspects of science, including outreach, diversity, interdisciplinary research, and developing viewpoints on science policy. In addition to Martijn Wieling, Merel Keijzer was also named founding member of the Young Academy of Groningen.

Operating as an independent organisation within the University the Young Academy aims to:

- unite researchers from different disciplines to actively promote interdisciplinary research
- contribute viewpoints on science policy and talent development and advise the University on these and related topics
- organise inspiring activities for the public to boost the relationship between science and society.

(http://www.rug.nl/research/young-academy/)

**PhD defenses**

In 2016, three PhD projects were completed.

Jelena Golubovic successfully defended her thesis “Mutual intelligibility in the Slavic language area” (promotores John Nerbonne, Vincent van Heuven (Leiden University), copromotor Charlotte Gooskens).

Femke Swarte completed her project “Predicting the mutual intelligibility of Germanic languages from linguistic and extra-linguistic factors” (promotores John Nerbonne, Vincent van Heuven (Leiden University), copromotor Charlotte Gooskens). Currently she works as a German teacher in secondary education in Leeuwarden.

Simon Šuster defended his thesis “Empirical studies on word representations” (promotor Gertjan van Noord). Currently he is a postdoc researcher at the Computational Linguistics & Psycholinguistics Research Center of the University of Antwerp.

**Conferences and Workshops**

The Deep Machine Translation Workshop 2016, organized by the QTLeap Project (Gertjan van Noord), took place at the University of Lisbon, on October 21, 2016. This was the second workshop on “Deep Machine Translation“. The first one was held in Prague in 2015. The DMTW goal was to bring together researchers and students working on machine translation approaches and technology using “deep understanding”.

**Research projects**

**QTLeap: a highly successful project**

The QTLeap project investigated and developed an innovative methodology for Machine Translation (MT) to support the upcoming generation of global interaction technology across linguistic barriers. The project was funded in the 7th Framework Program from 2013-2016.

Parsing algorithms are studied for input containing ill-formed and unexpected input. Novel combinations of classical spell-
correction techniques with deep learning work well for normalization.

*Frontiers of Language Variety (John Nerbonne)*
The NWO Internationalization project "Frontiers in Language Variation" involved Groningen, Leuven and Freiburg. It completed its final year in December 2016. The OA proceedings of 'Methods XV, The Future of Dialects', (held in Groningen) included four papers from project participants, and appeared in February 2016.

*Improving speech learning models and English pronunciation with articulography*
In this project, Martijn Wieling investigates tongue trajectory differences between native and non-native English speech. Furthermore, he investigates if visualizing tongue trajectories helps English pronunciation teaching.

*Mutual intelligibility of closely related languages in Europe*
Charlotte Gooskens and colleagues tested mutual intelligibility between 60 pairs of closely related Germanic, Romance and Slavic languages and explained the results by means of linguistic and non-linguistic factors.

*Lost in Translation – Found in Meaning (Johan Bos)*
The aim of this NWO-VICI (2015-2020) project is to study the role of meaning in translation. This is done by building a large semantically annotated parallel corpus for the languages English, German, Dutch and Italian.

**Other activities**
- Johan Bos was plenary speaker at the *Logical Aspects of Computational Linguistics* (LACL) conference in Nancy, France, December, 7, 2016.
- John Nerbonne gave the keynote lecture ‘Vaulting ambition’, at the *Grammar and Corpora* conference at the Institute for the German Language in Mannheim, Germany, November, 11, 2016.
- Barbara Plank was publicity chair *Association of Computational Linguistics* (ACL), from January until August 2016.
- Barbara Plank gave the keynote lecture “Processing non-canonical or noisy text: fortuitous data to the rescue” at the 2nd Workshop on Noisy User-generated Text (WNUT’-2), part of the program of the 26th *International Conference on Computational Linguistics* in Osaka, Japan. December, 11, 2016.
- Martijn Wieling became chair of the science policy committee of the Dutch Young Academy (DJA).

**Featured publication – Computational Linguistics**


*Abstract:*
Keystroke dynamics have been extensively used in psycholinguistic and writing research to gain insights into cognitive processing. But do keystroke logs contain actual signal that can be used to learn better natural language processing models? We postulate that keystroke dynamics contain information about syntactic structure that can inform shallow syntactic parsing. To test this hypothesis, we explore labels derived from keystroke logs as auxiliary task in a multi-task bidirectional Long Short-Term Memory (bi-LSTM). Our results show promising results on two shallow syntactic parsing tasks, chunking and CCG supertagging. Our model is simple, has the advantage that data can come from distinct sources, and produces models that are significantly better than models trained on the text annotations alone.
Discourse and Communication

Staff Members:
John Hoeks (coordinator), Veerle Baaijen, Marcel Bax, Kees de Glopper, Myrte Gosen, Mike Huiskes, Carel Jansen, Tom Koole, Femke Kramer, Jacqueline van Kruiningen, Yfke Ongena, Gisela Redeker, Ielka van der Sluis, Ninke Stukker.

PhD Candidates:
Lennie Donné, Agnes Engbersen (external), Anke Herder (external), Frans Hiddink (external), Ruth Koops van’t Jagt, Joëlle Ooms, Maaike Pulles (external), Nynke van der Schaaf (external), Ellen Schep (external), Lucas Seuren, Nienke van der Vliet, Louise van Weerden (external), Annerose Willemsen, Lambert Zaad (external).

Research focus areas
The Discourse and Communication group conducts quantitative and qualitative research on language and communication. The group’s research addresses a variety of themes within the broad field of communication research. Object of study are communication processes in general, but also more specifically the design and optimization of communication products, the persuasive effects of these communication products, the development of communication skills, and the way these skills are taught in primary and secondary education and trained in the workplace. Communication is investigated primarily in professional settings such as health care (persuasive health campaigns, doctor-patient conversations), and education (teacher-student interaction), but also in public and private organisations (persuasive effects of advertisements, interaction and conversation during meetings, campaigns on sustainability). Its research program is closely linked to the University of Groningen research focus areas Healthy Ageing and Sustainable Society.

Key publications - Computational Linguistics


http://dx.doi.org/10.1080/01434632.2016.1212865


Highlights 2016

Conferences and Symposia

Symposium 'The Multimodal Expression of Viewpoint'

The symposium The Multimodal Expression of Viewpoint was held on the occasion of the PhD defence of Kashmiri Stec, January 18, 2016. It was organized by Gisela Redeker with a number of international speakers: Herbert H. Clark (Stanford), Aliyah Morgenstern (Sorbonne Nouvelle), Teenie Matlock (UC Merced) and the two local speakers Tom Koole (UG) and Alan Cienki (VU Amsterdam and Moscow State Linguistic University).

Groningen Symposium on Language and Social Interaction (GSLI)

Last year, the first GSLI was concerned with interaction and learning, and this year’s focus was on interaction and health care. The organizing committee consisted of Tom Koole and Yfke Ongena. The symposium attracted 30 participants from the UK, Belgium, Denmark, Finland and of course the Netherlands.

The theme of health care was well represented across its full range by the speakers. The presentations covered canonical encounters like the consultation between a consultant surgeon and their patient (Mike Huiskes on how orthopedic surgeons extend their questions beyond the completion point) all the way to online support and advice sessions (Margot Jager and Wyke Stommel on chat counselling) (https://rolsi.net/2016/01/31/guest-blog-groningen-symposium-on-language-and-social-interaction/).

International Academy for CA (IACA16)

With the support of ISCA (the International Society for Conversation Analysis), the Language and Social Interaction group organized the first International Academy for Conversation Analysis (IACA16) from July, 11-14, 2016. IACA is an event that takes place in between two ICCA-conferences (International Conference on Conversation Analysis (2014 and 2018) where the focus is more on the research process rather than on research output. The academy is meant for CA researchers in all career stages, including PhD students. It offers members of the CA community an environment to learn from each other about analytical choices, modes of analytical reasoning, and the different technologies that may support CA research.

The program comprised four 4-day workshops on "Interaction Organization" (Geoffrey Raymond), on "Actions and Activities" (Paul Drew & Merran Toerien) on "Practices" (Lorenza Mondada), and on embodiment "Contexts" in medical interaction (Jeffrey Robinson). Two plenary lectures were given, one by Elisabeth Couper-Kuhlen titled “Interactional Linguistics: its Achievements and its Future” and one by Anita Pomerantz titled “Methodological Issues in Conversation Analysis: Starting and Moving Forward”.

Members of the organizing committee were: Agnes Engbersen, Myrte Gosen, Mike Huiskes, Tom Koole, Henrike Padmos, Lucas Seuren.

PhD defenses

In 2016, two PhD theses were successfully defended.

Kashmiri Stec defended her thesis “Visible Quotation: The multimodal expression of viewpoint” (promotors Gisela Redeker, Alan Cienki (VU University Amsterdam), co-promotor Mike Huiskes). She works as a User Experience (UX) researcher for Bang & Olufsen in Denmark.
Nynke van der Schaaf defended her thesis “Kijk eens wat ik kan! Sociale praktijken in de interactie tussen kinderen van 4 tot 8 jaar in de buitenschoolse opvang”, on interactional practices of young children (promotor Kees de Glopper, copromotores Jeanette Doornenbal (Hanze University of Applied Sciences), Jan Berenst). She works as a teacher and trainer at the School of Education and as researcher at the Professorship Integrated Youth Policy at the Hanze University of Applied Sciences.

Other activities
- Kees de Glopper gave the keynote lecture “Lezen en schrijven bewust in samenhang” at the workshop Begrijpend lezen: Onderwijspraktijk en wetenschap in wisselwerking over lezen en schrijven, September 28, 2016, Rotterdam.
- Mike Huiskes was keynote speaker at Anèla/VIOT Juniorendag 2016. His lecture was titled “Development of communication skills of orthopedic surgeons in training”, March, 11, 2016, Amsterdam.
- Tom Koole became member of the Editorial Board of Linguistics and Education.
- Annerose Willemsen became member of the steering commitee Landelijk Netwerk Taal in het basisonderwijs.
- Ninke Stukker was organizer of the symposium Neerlandistiek met Stijl on the occasion of the farewell of Arie Verhagen (Professor of Dutch Linguistics/Leiden University), September 30, Leiden.

Featured publication
Discourse & Communication


Abstract:
Shared understanding is at the heart of social interaction: it is demonstrated and maintained with every turn-at-talk. Still intersubjectivity can on occasion break down, and this can happen for a plethora of reasons. Using conversation analysis, this paper demonstrates three practices that participants in Dutch talk-in-interaction use to repair breakdowns of intersubjectivity. The first practice consists of an oh ja-prefaced declarative. With this practice an interactant conveys that s/he remembers here-and-now some information which s/he thereby treats as relevant for understanding the prior talk. The second practice consists of an oh-prefaced declarative, with which the speaker claims to now understand something s/he earlier did not understand or had misunderstood. Both practices are declarative yes/no-type initiating actions, meaning that confirmation is treated as the relevant next action. Both practices, however, do very distinct actions. With a remembering, an interactant claims independent epistemic access, whereas with doing understanding access is local, and inferred from and dependent on the co-interactant’s talk. We compare these two practices to oh-prefaced yes/no-type interrogatives. These too are used to address problems with intersubjectivity, but they claim instead that the prior talk by the interlocutor somehow contradicts the speakers background assumptions.
Neurolinguistics and Language Development

Staff Members:
Ben Maassen (coordinator), Roelien Bastiaanse, Gerard Bol, Kees de Bot, Hilde Hacquebord, Petra Hendriks, Bart Hollebrandse, Angeliek van Hout, Roel Jonkers, Merel Keijzer, Hanneke Loerts, Wander Lowie, Emar Maier, Monika Schmid, Simone Sprenger, Wim Tops, Marjolijn Verspoor

Postdocs:
Rimke Groenewold, SrdanPopov, Jacolien van Rij-Tange (Veni), Simone Sprenger

PhD Candidates:
*PhD candidates IDEALAB (http://em-idealab.com/)

Research focus areas
The Neurolinguistics and Language Development research group is a strongly interdisciplinary group that investigates the organization of language in the brain, how language is processed and how languages are learned. To investigate these questions, a wide variety of methods is employed, ranging from spontaneous speech analysis, comprehension and elicitation experiments and the

Key publications - Discourse & Communication


development of theoretical models, to eye tracking, EEG and functional Magnetic Resonance Imaging (fMRI) techniques.

The organization of language in the brain and how language is processed in the brain is studied through the comprehension and production of various aspects of verbs (in developmental disorders and aphasia), phonological processing (in aphasia and dyslexia), print decoding (in dyslexia), speech disorders (in children and adults), sentence processing (in non-brain-damaged and aphasic speakers) and ambiguity resolution (in normal speakers and schizophrenic patients).

How a first, second or foreign language is acquired, maintained and sometimes lost is studied by considering the linguistic, social as well as cognitive processes involved in language development and use. Important areas of research are typical and atypical first language acquisition (such as in children with autism spectrum disorders), bilingualism, language attrition, and the development of bilingual education in the Netherlands. Because of its focus on language across the lifespan, from childhood to elderly age, this research program is closely linked to the University of Groningen research focus area Healthy Ageing.

**Highlights 2016**

**Grants, Awards and Honors**

*Member of the Royal Netherlands Academy of Arts and Sciences (KNAW)*

Petra Hendriks has been appointed a member of the Royal Netherlands Academy of Arts and Sciences (KNAW). The KNAW has appointed a total of 16 new members. Academy members are prominent researchers active in all the disciplines. New members are nominated by peers from within and outside the Academy. The Academy has about five hundred members. Appointment is based on academic achievement and membership is for life. The new members were installed on September, 12, 2016 at the Trippenhuis Building, the seat of the Academy in Amsterdam.

Petra Hendriks combines theoretical analysis and psycholinguistic methods in her work to explore how language comprehension develops in ‘ideal’ circumstances, but also how it develops in ‘less ideal’ listeners, for example children with autism, ADHD or hearing impairments. She also studies when and how speakers and listeners take into account each other’s perspective to achieve successful communication.

Member of the Young Academy

In December, Merel Keijzer was elected member of De Jonge Akademie (the Young Academy), part of the KNAW. Every year The Young Academy selects ten talented new researchers to add to its ranks. In addition to their proven research excellence, Young Academy members take a broad interest in science and in science communication.

Merel Keijzer specializes in the cognitive and language control of bilinguals across the lifespan, with a special focus on bilingualism and cognitive ageing. Employing both behavioural and neuroimaging techniques, she is particularly interested in establishing how patterns in individual bilingual language use affect the type and magnitude of cognitive advantage that is found in advanced age. She also studies how bilingual language use can be isolated from other factors that enhance cognitive reserve, such as musical training, stimulating social activities, and physical exercise (http://www.rug.nl/news/2016/12/three-ug-researchers-join-de-jonge-akademie).

PhD defenses

In 2016, eight PhD-projects were completed.


Franziska Köder defended her thesis “Between direct and indirect speech: The acquisition of pronouns in reported speech” (promotores Jan-Willem Romeijn (Faculty of Philosophy, UG), Petra Hendriks, copromotor Emar Maier). She works as a postdoctoral fellow at the Department of Philosophy, Classics, History of Arts and Ideas, University of Oslo, Norway.

Ton de Kraay defended his thesis “Differentiation to improve the articulation between levels: In the teaching of English in primary and secondary education in the Netherlands.” (promotor Kees de Bot, copromotor Erik van Schooten, University of Amsterdam). He works as English Lecturer at the School of Education of Rotterdam University.

Sanne Kuijper defended her thesis “Communication abilities of children with ASD and ADHD: Production, comprehension, and cognitive mechanisms” (promotor Petra Hendriks, copromotor Catharina Hartman, (UMCG)). She works as a lecturer and researcher at the Faculty of Behavioural and Social Sciences, Orthopedagogy & Clinical Educational Science in the Department Orthopedagogy at UG.

Three PhD candidates obtained a joint degree from the IDEALAB programme.

Seckin Arslan defended his thesis “Neurolinguistic & Psycholinguistic Investigations on Evidentiality in Turkish” (promotor Roelien Bastiaanse, copromotor Claudia Felser (Potsdam University)). Now he is a postdoctoral research fellow at the Potsdam Research Institute for Multilingualism, University of Potsdam, Germany.

Rui Qin defended her thesis “Neurophysiological studies of reading fluency. Towards visual and auditory markers of developmental dyslexia” (promotores Ben Maassen, Isabell Wartenburger (Potsdam University), Natasha Maurits (UMCG)).

Jinxing Yue defended his thesis “Tone-word recognition in Mandarin Chinese” (promotores Roelien Bastiaanse, David Howard (Newcastle University), copromotor Kai Alter (Newcastle University)).
Research projects

The age effect in bilingual development
Monika Schmid’s NWO-Vici project
‘The age effect in bilingual development’ ran from 2010-2016. A key result from the project shows that grammatical gender is a challenging feature to acquire for second-language learners of Dutch and German, but is fully maintained in first-language attriters.

Neurolinguistic profiles of developmental dyslexia in a longitudinal perspective
Ben Maassen’s project
‘Neurolinguistic profiles of developmental dyslexia in a longitudinal perspective’ was funded by an NWO Open Competition grant from 2011-2018. Part 1 of this programme: ‘Normalization and compensation patterns in developmental dyslexia’ has been finished with a PhD-defence by Britt Hakvoort at the University of Amsterdam (promotores: Aryan van der Leij, Ben Maassen). Data collection for Part 2: ‘Developmental Trajectories of Advanced Reading Networks’ has been completed with studies of advanced reading, reading in English as L2, and brain imaging white matter tractography.

A Crosslinguistic Perspective on Children’s Acquisition of Grammar Meaning Interface (Angeliek van Hout)
The French-Dutch bilateral Van Gogh project involved Groningen and Nantes. Teams at both universities collaborated on several research projects on first language acquisition of syntax and semantics. The project completed its final year in December 2016.

Grasping Meaning across Languages and Learners (GraMALL) (Angeliek van Hout)
The NWO Internationalization project involved a research network between 8 teams in 6 countries including the universities of Groningen; Cambridge; Greenwich; Nantes; Milano-Bicocca; Autonoma Barcelona; Pompeu Fabra (Barcelona); ZAS (Berlin), and affiliated participants at University of the Basque Country, Bristol and Stuttgart. The teams collaborated on several research projects on first language acquisition of syntax and semantics, and prepared a Marie Curie International Training Network proposal.

Conferences and Workshops

Workshops
Angeliek van Hout was organizer of the workshop ‘Developing Reference: On the role of cognitive abilities in the acquisition of definiteness and pronouns in Dutch children’. Lectures were given by Research Master students and faculty of University of Groningen and University of Amsterdam. In February, a workshop on reported speech, pronouns, and perspective was organized on the occasion of the PhD defense of Franziska Köder.

Symposia
Also in February, the LANSPAN group organized the symposium 'Individual differences in language learning and teaching'.

On the occasion of the defense of Joost Hurkmans, the health care organization ‘Revalidatie Friesland’ together with AfasieNet (platform for professionals) organized the symposium ‘Spraakapraxie; theorie en klinische praktijk’ about apraxia of speech. Roel Jonkers was chair and during the symposium scientific as well as clinical aspects of apraxia of speech were discussed. Ben Maassen gave a talk about process-oriented diagnostics.

Other activities

• Angeliek van Hout chaired two 2-day research meetings with her international group, funded by NWO internationalization grant GraMALL. At the Berlin meeting, there were several plenary talks, work group meeting in parallel sessions and brainstorming sessions to discuss possibilities for applying for European grants. January 15-16, 2016, Berlin, Germany. At the meeting in Como, the group designed a European research project in preparation of a Marie Curie International Training grant. June 16-17, Como, Italy.
• Roel Jonkers was member of the programme committee of Science of Aphasia 17, Venice, September 25-30, 2016.
• Simone Sprenger gave the plenary talk “Speaking in chunks: How the use of formulaic language makes us fluent” at the workshop Current Trends in Figurative Language Research, Tübingen, December 8, 2016.
• Marjolein Verver was keynote speaker at two conferences: (1) “The dynamics of L2 development. You have come a long way” EuroSLA, August 24-27, 2016 in Jyväskylä, Finland. (2) “You have come a long way. To chunk or not to chunk” at the International Association of Teaching English as a Foreign Language, Birmingham, UK, October 8, 2016.
• As chair of the Motor Speech Disorders Committee of the International Association of Logopedics and Phoniatrics (IALP) Ben Maassen organized and presented at two symposia at the 30th World Congress, Dublin, August 21 - 25: (1) Future Directions in Clinical Motor Speech Research - Genetics, Acoustics, Modelling, and (2) Assessment and Outcome Measures.
• Merel Keijzer was keynote lecturer at the International Conference on Language Attrition (ICFLA), July 2016, University of Essex, UK.

Key publications - Neurolinguistics and Language Development


Featured publication - Neurolinguistics and Language Development


Abstract:
A 40-year-old, non-aphasic, right-handed, and polyglot (L1: French, L2: Dutch, and L3: English) woman with a 12-year history of addiction to opiates and psychoactive substances, and clear psychiatric problems, presented with a foreign accent of sudden onset in L1. Speech evolved toward a mostly fluent output, despite a stutter-like behavior and a marked grammatical output disorder. The psychogenic etiology of the accent foreignness was construed based on the patient’s complex medical history and psychodiagnostic, neuropsychological, and neurolinguistic assessments. The presence of a foreign accent was affirmed by a perceptual accent rating and attribution experiment. It is argued that this patient provides additional evidence demonstrating the outdatedness of Whitaker’s (1982) definition of foreign accent syndrome, as only one of the four operational criteria was unequivocally applicable to our patient: her accent foreignness was not only recognized by her relatives and the medical staff but also by a group of native French-speaking laymen. However, our patient defied the three remaining criteria, as central nervous system damage could not conclusively be demonstrated, psychodiagnostic assessment raised the hypothesis of a conversion disorder, and the patient was a polyglot whose newly gained accent was associated with a range of foreign languages, which exceeded the ones she spoke.

Theoretical and Empirical Linguistics

Staff Members:
Mark de Vries (coordinator), Dicky Gilbers, Nanna Hilton, Jack Hoeksma, Peter Houtzagers, Bob de Jonge, Eva Juarros-Daussà, Wolfgang Kehrein, Remco Knooikuizen, Siemon Reker, Anja Schüppert, Willem Visser, Gerry Wakker, Jan-Wouter Zwart

Postdocs:
Jakub Dotlacil (Veni), Marlies Kluck

PhD Candidates:
Bernat Bardagil-Mas, Charlotte Lindenbergh, Amber Nota, Sander Orriens, Leanne Schreurs (external)

Research focus areas
The research group Theoretical and Empirical Linguistics studies the syntax, semantics, morphology, phonology, and phonetics of a variety of languages with a view to enrich our empirical knowledge as well as our theoretical understanding of the nature of the human language faculty.

A core characteristic of this research is in-depth cross-linguistic comparison, both synchronically and diachronically. The group aims to contribute to the abstract formalization of the properties of language. In addition, the group is interested in sociolinguistic aspects of language variation. Working from hypothetic-deductive methods next to bottom-up strategies, the boundaries between fundamental principles, generalizations, and parametric variation and change are investigated. Specific fields of investigation include: the syntax and semantics of complex construction types (parentheses, dislocation, coordination, relative clauses), the foundations of syntactic structure and the role of the interfaces with the sound and meaning components of the grammar, ellipsis phenomena, information structure, polarity items, morphosyntactic dependencies and typological variation, Dutch corpus linguistics, phonology as human behaviour, musical aspects of phonology, tonal accents and prosody.
A strength of the research group is the combination of a theoretical orientation with the empirical study of language data from a variety of families, including West and North Germanic, Romance, Slavic, and outside of the Indo-Germanic group, Turkish, Avar, and Je in particular.

**Highlights 2016**

**Conferences and workshops**

*Workshop Fundamentals of minimalist syntax*

Jan-Wouter Zwart was organizer of the Workshop ‘Fundamentals of minimalist syntax’. It was held in June as a pre-TABU Day seminar in honor of David Adger.

*Conference Transition between ‘the Nordic countries’ and ‘Europe’*

The International Association of Scandinavian Studies (IASS) held its thirty-first conference from 9 to 13 August 2016 in Groningen. The theme of the conference was ‘Transition between ‘the Nordic countries’ and ‘Europe’’. It was hosted by the Scandinavian Studies section of the Department of European Languages and Cultures (ETC) and Anja Schüppert was co-organizer.

**Research projects**

*Incomplete Parenthesis (INCPAR)*

Mark de Vries’ project ‘Incomplete Parenthesis: Determining how and why secondary propositions can be elliptical or fragmented from a cross-linguistic and multifaceted theoretical perspective’ is funded by an ERC Starting Grant from 2011-2016.

The online database ParaCrawler was launched [www.let.rug.nl/paracrawler/]. It contains cross-linguistic information about a large variety of parenthetical constructions, and also serves as a knowledge platform.

**Farewell Siemon Reker**

On March 15, 2016 Siemon Reker ended his academic career as Professor of Groningen Language and Culture. In 1984 he was appointed the first *Streektaalfunctionaris* (regional language official) of the province of Groningen. He also has been chair of the Bureau Groninger Taal en Cultuur since its foundation in 1996. In 2001, he became endowed professor funded by the ‘J.B. Scholtenfonds’. In 2007 he received the first full professorship for Gronings Dialect. On the occasion of his farewell he published the ‘Biografie van het Gronings’ (Biography of Gronings Dialect).

**Other activities**

- Dicky Gilbers was member of the defence committee of Marie-Eve Joret’s dissertation “Early Childhood Immersion, Music Education and Executive Functions” (Vrije Universiteit Brussel), June 21, 2016.
- Mark de Vries was plenary speaker at the 18th Seoul International Conference on Generative Grammar (SICOGG), Seoul, August 3-6, 2016. He gave a series of 4 lectures under the heading "Beyond core
syntax: on appositive and additional material”.

- Mark de Vries was guest editor of Nederlandse Taalkunde.
- Willem Visser was guest editor of Us Wurk, tydskrift foar Frisistyk and It Beaken. Tydskrift fan de Fryske Akademy.

**Featured publication – Theoretical and Empirical Linguistics**


This book (1348 pages) contains 1000 short, column-like texts that describe the characteristic of the Gronings dialect, supplemented with longer summaries that provide many new insights. The book provides an historical overview of the facts of the language spoken in Groningen from about 1200 until 2016: the dynamics of the symbols and their pronunciation, the words and their meanings, word forms and constructions.

The book also pays large attention to the usage of the language by the people of Groningen including what they published about their language during the past centuries, ranging from Old Frisian and Middle Low German to the Gronings as it is spoken today.

**Key Publications – Theoretical and Empirical Linguistics**


**Schüppert, A., Hilton, N. & Gooskens, C.** (2016). Why is Danish so difficult to understand for fellow Scandinavians? *Speech Communication*, 79, 47-60. DOI: 10.1016/j.specom.2016.02.001

3 CLCG IN SOCIETY

The societal relevance of the research groups’ work is evident from commissioned research, applied research activities, and media attention for several publications. CLCG members have also effectively engaged with audiences through public lectures and debates, professional and popular publications, and non-traditional media such as blogs and websites.

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Computational Linguistics

Stimmen fan Fryslân
Charlotte Gooskens is member of the project ‘Stimmen fan Fryslân’ (Voices of Friesland) that is part of the project ‘Lân fan taal’, initiated by Nanna Hilton (Empirical and Theoretical Linguistics).

Position paper “Lingua Receptiva”
Together with a number of other knowledge institutes in the Netherlands and Flanders, Taalunie published a position paper about Lingua Receptiva for the Skills Agenda of the European Commission. Charlotte Gooskens is co-author.

Context: Through the New Skills for New Jobs initiative, the European Commission wants to (1) promote better anticipation of future skills needs, (2) develop better matching between skills and labour market needs and (3) bridge the gap between the worlds of education and work. With relatively little effort, the use of lingua receptiva can contribute significantly towards achieving these goals. Including it in the Skills Agenda as a “transversal skill” could: (i) enhance the key competence “Communicating in and learning a foreign language”; (ii) refine the European Qualification (ten Thije et.al, 2017, p: 3)


Key activities & publications with societal impact - Computational Linguistics

[Festival/Exhibition]
Martijn Wieling, Taalvariatie en -verandering in Nederland, invited lecture at the theatre festival Oeral, June 13, 2016.

[Professional Publication]


[Public lecture/debate/seminar]
Martijn Wieling, Taalvariatie op de tong, presentation at NWO’s Bessensap, June 10, 2016.

Discourse and Communication

Health Communication

Symposium Health Communication Platform
On December 17, the Health Communication Platform, coordinated by Tom Koole and Debbie Jaarsma (UMCG), celebrated its 1st anniversary with a symposium. Participants were invited to give short pitches to familiarize the audience with the research that has been done and about the challenges communication within UMCG faces. Participants engaged in discussion about which types of research could be useful and how to apply the existing knowledge to professional practice.

Masterclass Health Communication
On April 22, 2016 the Zorg Innovatie Forum (Healthcare Innovation Forum), among others, organized an inspiring day with lectures and a masterclass about health and communication. Carel Jansen and Ruth Koops van ’t Jagt talked about how their research builds a bridge between health professionals and functionally illiterate persons and by how the fotostories they developed are an innovative and effective means to communicate health messages to this target population.

Kenniscafé, Seminars, Expert meetings
Studium Generale Groningen (UG and Hanze University of Applied Science) organises innovative and multidisciplinary activities on science, culture and society. One of these activities is the Kenniscafé. Femke Kramer hosted the session ‘Bewegend leren’ and ‘Toekomstmuziek’. Mike Huiskes was interviewee of the Kenniscafé ‘Wat bedoelt u dokter?’ (‘What do you mean doctor?”) about health communication.

Femke Kramer gave a series of writing seminars for science journalists for the Stichting Cursussen Wetenschapscorrespondentie (SCW). She also was host at the expertmeeting ‘Radicalisering en Polarisatie’ (Radicalization and Polarization) for the Muncipality of Groningen/Team Public Order and Safety.

Writing research - Training and Consultancy

Knowledge Platform ‘Tekst met beleid’
The knowledge platform ‘Tekst met Beleid’ (Text with Policy) supports civil servants, administrators and politicians with writing and using better policy statements. Thereby the platform contributes to a better functioning of local governments. The platform is an initiative of the department Applied Linguistics/Dutch Language and Culture (Kees de Glopper and Jacqueline van Kruiningen) in collaboration with Pro Facto (research-, education- and consultancy office; prof. dr. Heinrich Winter and Carine Bloemhoff). In the article ‘We doen maar wat’ (‘We muddle along’) that appeared in the professional journal ‘Tekstblad’ Kees Frenay and Jaqueline van Kruiningen point towards the difficulties of the writing process of municipalities and offer solutions to the problems.

Education and Educational research

National steering group didactic methods
Kees de Glopper is member of the steering group DUDOC-ALFA that develops and coordinates a program that provides teachers in secondary education and trainers of teachers in higher education the possibility to do a PhD in the domain of didactic methods. The topic of the research proposals should clearly apply to the professional practice in the secondary educational system. There is a new PhD-round in January 2017.

The group also develops a national workforce plan to develop research and education in the domain of didactic methods in the humanities.

Study day Interactie in de klas
On June 8, the national Study day ‘Interactie in de klas’ (Interaction in the classroom) took place in Groningen. This meeting was organized by Annerose Willemesen for
colleague researchers to talk about and discuss their research and developments in the field.

**National Network(day) Language in Primary Education**

As member of the steering group Landelijk Network Taal (National Network Language), Annerose Willemsen organized the national networking day ‘Taal in Samenhang’ on September, 29. The network group is part of the ‘Nationaal Expertisecentrum Leerplanontwikkeling’ (National Expert Center for Curriculum Development). The center aims to bring knowledge from research, society, policy, and professional practice together for the development of the curriculum. Other meetings were held on April 14 and 21, and on June 15 (including a discussion night).

**Key activities & publications with societal impact - Discourse and Communication**

**[Professional Publication]**


**[Media coverage or contribution]**

**[Public lecture/debate/seminar]**
Mike Huiskes(Interviewee), Kenniscafé Gezondheidscommunicatie "Wat bedoelt u dokter?", March, 17, 2016.

**Neurolinguistics and Language Development**

**Science Live**
During the summer vacation from August 29 until September 4 2016, Bart Hollebrandse, Angeliek van Hout, in collaboration with Tom Roeper (University of Massachusetts Amherst), investigated the complexity of repetitions by means of an app they developed for this purpose. The research was carried out in NEMO Science Live and 287 people participated.

Science Live is the innovative research program of NEMO Science Museum. It opens up the museum floor to real, publishable, peer-reviewed research, with NEMO visitors participating as experimental subjects. An important aspect of NEMO’s mission is to enable visitors, young and old, to experience how scientific knowledge is acquired and how the scientific method works. By encouraging its visitors to be part of the scientific process itself, NEMO also becomes a place where scientific knowledge is generated. Its public becomes a contributing force in advancing science (http://www.sciencelive.nl/onderzoeken/een-zin-in-een-zin-in-een-zin-in-een-zin-kun-jij-dit-aan).

Portraits made by students of the Research Master Linguistics
Toivo Glatz, PhD student in the Dyslexia group, developed a Dutch version of GraphoGame (GG), which is an evidence-based game for early rehabilitation and diagnostics of reading difficulties developed by the University of Jyväskylä in Finland. (http://info.grapholearn.com/). The game starts by training letter knowledge, and then on to phonological awareness skills like blending and spelling to play with syllables, words and pseudo words. So far, over 400 children completed a 2-12 week playing phase with daily sessions.

Toivo Glatz presented the first results of his GG study at the British Dyslexia Association (BDA) conference in Oxford, Great Britain (March, 10-12, 2016) and the International Workshop on Reading and Developmental Dyslexia (IWORDD) in Bilbao, Spain (May, 5-7, 2016). His main findings are that GG training at the onset of first grade improves letter knowledge in all children, as well as reading fluency for those who have well developed phonological awareness skills.

Key activities & publications with societal impact – Neurolinguistics and Language Development

[Media coverage or contribution]
Roelien Bastiaanse, interview “Snijden in je werkwoorden” (with Christien Boomsma), Dagblad van het Noorden, April 10, 2016.


Petra Hendriks,”Liegen is een kunst” Article in Dagblad van het Noorden by Maaike Borst about Petra Hendriks’ research, September 10, 2016.

[Professional publication]


[Public lecture/debate/seminar]

Theoretical and Empirical Linguistics

Stimmen fan Fryslân
Nanna Hilton is initiator of the project ‘Stimmen fan Fryslân’ (Voices of Friesland) that is part of the project ‘Lân fan taal’: “Actually, everyone is multilingual – and Frisian alone has many variants. This is an intriguing phenomenon that the University of Groningen has investigated during the project “Stimmen fan Fryslân”. It is inspired by the British project “Voices Recordings”, in which as many varieties as possible of British speech were recorded.

The core of “Stimmen fan Fryslân” is an extensive smartphone app with associated website. Here you can find a growing number of languages and dialects. You can also record and add spoken language yourself. You can find and share knowledge about multilingualism within an online community. There are also blogs and a language game. Within the framework of “Language Files”, renowned researchers will give lectures in 2018 about the medical, technological and social applications of linguistic research. Linguists will also visit secondary schools.

The online applications will be launched in (late) summer 2017.

In 2018, Leeuwarden-Fryslân will be the European Capital of Culture. Lân fan taal is an important part of this. Many institutions and individuals in Friesland and (far) beyond are working together to give language diversity a future” (https://lanfantaal.nl/en/project/voices-of-friesland/).

Voornamen van AlleGroningers (1600-1811)
The book ‘Voornamen van AlleGroningers (1600–1811)’ contains a collection of all first names of people born and registered in Groningen between 1600 until August 1811, before the Napoleonic Code. It was published on the occasions of Reker’s farewell and freely distributed among visitors of the ‘Dag van de Grunngere Toal’ (Day of Gronings Dialect) on March 19, 2016.

Dagwoord Werkdagelijkse column
For over 200 days, Siemon Reker drew a Gronings book from the bookcase, wrote a literary column about it, and mailed that during the last year before his farewell to several hundred followers of the Bureau Groninger Taal en Cultuur. These pieces are bundled in the edition Dagwoord Werkdagelijkse column 02.03.2015-14.03.2016 at the end of 2016.

Book of the Year Award
Narrative

Each year one of the CLCG research groups has the opportunity to highlight research projects or activities with societal impact or relevance carried out within the group in the form of a narrative. This year’s narrative ‘Between human and machine’ is about the NWO-VICI project of Johan Bos and the NWO KIEM-project of Gosse Bouma. The narrative is provided by Saskia Visser, project leader for the Science Shop Language, Culture and Communication and policy officer Public Engagement.

Between man and machine

Naturally, the computer is no longer conceivable from our communicative society. We not only use him as a means for communicating with other people, but we also communicate with computers themselves. Of course, this does not always work. One can laugh about funny translations on Google Translate and be frustrated by the voice recognition that misinterprets one’s home location time after time. However, communication between man and machine gets better and better and the possibilities increase. This makes the field of computational linguistics so interesting and important.

Computational linguistics is concerned with how computers process natural (i.e. human) language. Within CLCG, computational linguists do research at the interface between linguistics and computer science and deal with theoretical, experimental and applied questions. Here, we present two examples that show how our researchers work on socially relevant projects.

Translation is of great significance

Translation is a difficult task, as Professor of Computational Semantics Johan Bos knows well by now. There is a lot more to do than literally translate word for word and take into account different word sequences of languages.
For example, if one literally translates “having a chat” into “een praatje hebben” (having idle talk) the meaning has changed significantly. Therefore we do not find this a good translation. But what exactly makes a good translation and how do you learn a computer to deal with such subtle differences? Bos’ NWO VICI project “Lost in translation, found in meaning” (2015-2020) focuses on all aspects of translations including the role of meaning.

His group of six researchers builds, among other things, The Parallel Meaning Bank, a large database of nearly a million English sentences, translated by people into Dutch, German and Italian. Incorporating more languages offers new opportunities. So far, the analysis of meaning in language produced by computers has mainly focused on English, but precisely the differences between languages can provide more insight into the process and free the way for all kinds of applications worldwide.

In the Parallel Meaning Bank, the computer generates the meaning of each individual sentence through linguistic analysis. After that, one can search for differences between translations through an automated analysis. One would expect that translated sentences will have exactly the same meaning, but human translators often seem to be much more creative when translating sentences. Sometimes they even leave things out or add other information, small changes that seem to take a translation further from its source but actually sound more natural. For example, have a look at this English sentence: "He removed the dishes from the table." A literal translation in Dutch provides the grammatical sentence “Hij verwijderde het vaatwerk van de tafel.” But no Dutch person would say that. Certainly you would say “Hij ruimde de tafel af.” (He cleared the table). “The dishes” have suddenly disappeared; obviously the meaning is included in the term “afruimen” (to clear away/to remove).

Interesting issues for which a self-learning computer system needs to make a lot of calculations, and therefore can definitely use a little help from humans. There is still a long way to go, but through this project we hope to understand what human translators are doing exactly and how to ultimately improve computer translations.

Searching for good answers

Another form of communication between man and machine takes place in question and answer sessions. For example, you ask your personal assistant on your phone to find out to which club a particular soccer player belongs. The system searches through large text files on the web for combinations of footballers and clubs, counts the most frequently occurring combinations and thereby quickly finds the most likely answer. Gosse Bouma was already involved with this kind of applications years ago. It started with relatively simple questions, such as the one above, and with ways to do manual searches for the correct coherence relations in large text files. Of course, as a linguist Gosse Bouma was interested in how grammar could help to deal with more difficult questions and to reduce the number of incorrect answers.

Meanwhile, the development of search methods continued and it became easier to look for patterns. Thanks to the NWO KIEM project “Direct ter zake” (Directly on the issue) (2015), Bouma could deepen his knowledge in this field. In KIEM projects, NWO stimulates collaboration between researchers and the creative industry in search of new knowledge and applications. In this case, the startup Bert Alkemade Creative Interaction wanted to know how computer search systems could help professionals to supply them with relevant
information in an automated way. This practical application was the main aim of the research project and immediately showed what the most difficult but also the most important issues were the researchers had to address. How do you deal with complex concepts in official texts? What is an acceptable error rate for users? The cooperation was very satisfying.

In the meantime, Bouma and Sokrates Technologies have started a next KIEM project. Socrates Technologies would like to develop a software application that enables aid organizations to quickly find relevant information in the UN database Reliefweb. This is an important source of information about crises in the world and it is of course of vital importance that aid organizations quickly get all relevant information in an Ebola outbreak or flood. This time, the partners will use deep learning, a method that enables the system to train itself.

Gosse Bouma: Portrait made by students of the Research Master students Linguistics.
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