

Centre for Language Studies

The mission of the Centre for Language Studies (CLS) carries out top-level research in Linguistics, Language and Speech Technology, and Communication Studies in a stimulating academic environment. Key aspects are innovation, an interdisciplinary approach, and a strong commitment to acquiring research funds, which helps strengthen the profile of research done at the Centre in the Netherlands and abroad.



There are five research programmes:

- Grammar and Cognition, combining theoretical research on language as a cognitive function with psycholinguistic research on language processing and language acquisition.
- Language in Time and Space, focusing on the comparative study of patterns of language contact, diffusion and change in a variety of different language settings and historical time-depths.
- Linguistic Information Processing, dealing with the development of computational models of language acquisition and processing, and testing these models under laboratory and real-world conditions.
- Communicative Competences, focusing on how human beings acquire and maintain an ability to communicate successfully in various contexts and modalities, and under various constraints.
- Professional Communication, which deals with the identification and explanation of cultural and linguistic factors that influence the effectiveness of documents.

Dr Asli Özyürek received a European Research Council Starting Grant entitled 'Language in our hands: Acquisition of spatial language in deaf and hearing children'. In this project Dr Özyürek will investigate to what extent our language learning ability is specific to learning a spoken language, and to what extent it relates to communicating in any modality.

Prof. Ans van Kemenade, together with other researchers from the programme *Language in Time and Space*, organized the highly successful 19th International Conference on Historical Linguistics (ICHL 19) at Radboud University Nijmegen from 10-14 August 2009. The ICHL conferences are the premier forum in the world for work on historical linguistics and language change in the languages of the world.

In September ten student assistants, funded by a special Royal Netherlands Academy of Arts and Sciences (KNAW) grant, started working on the project NEWSPEAK. Within the framework of this



A deaf Turkish boy playing with his mother and sister (video stills by Menno Jonker).

Staff

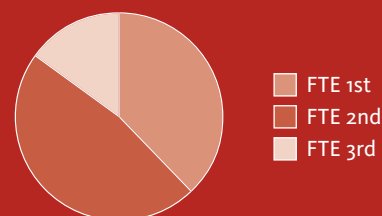
Prof. L.W.J. Boves (o)
 Prof. P.A.J.M. Coppens (p)
 Prof. A.F.J. Dijkstra (p)
 Prof. N.J. Enfield (e)
 Prof. J.P.M. Fikkert (p)
 Prof. M. Gerritsen (p)
 Prof. C. Gussenhoven (p)
 Prof. H. Hoeken (o)
 Prof. H. de Hoop (p)
 Prof. R.W.N.M. van Hout (o)
 Prof. H.M.G.M. Jacobs (o)
 Prof. C.J.M. Jansen (o)
 Prof. A.M.C. van Kemenade (o)
 Prof. W. Klein (e)
 Prof. H.P.M. Knapen (e)
 Prof. S. Kroon (e)
 Prof. D.A. van Leeuwen (e)
 Prof. S.C. Levinson (e)
 Prof. M.J.P. van Mulken (o)
 Prof. P.C. Muysken (o)
 Prof. A.H. Neijt (o)
 Prof. T. Rietveld (p)
 Prof. R.A. van der Sandt (e)
 Prof. P.J. Schellens (o)
 Prof. L.G. de Stadler (e)
 Prof. C.H.M. Versteegh (o)

Tenured

Full Professors	7.9 FTE
Associate Professors	4.1 FTE
Assistant Professors	5.6 FTE
Researchers	2.2 FTE

Non-tenured

Researchers	14.3 FTE
Doctoral candidates	40.1 FTE



grant excellent Master's students work under the supervision of senior researchers on corpus research of written language, focusing on language in the new media, such as Internet blogs, MSN and Hyves.

Nick Enfield, who was appointed Professor of Ethnolinguistics with special reference to South-East Asia, delivered his inaugural lecture on 'Human Sociality at the Heart of Language'. Prof. Enfield received a European Research Council Starting Grant for the project 'Human Sociality and Systems of Language Use'.

On 30 September, Professor John Searle of the University of California, Berkeley, held his audience spellbound as he spoke on 'The Nature of Language'. This special lecture marked the official opening of the International Max Planck Research School (IMPRS) for Language Sciences, a joint initiative of the Max Planck Institute for Psycholinguistics, the Centre for Language Studies, and the Donders Institute for Brain, Cognition and Behaviour. The new

research school, supported by the Max Planck Society, provides an interdisciplinary training and research programme for excellent PhD students in all aspects of language sciences.

In 2009 eleven dissertations were defended, including one *cum laude*: Kofi Yakpo's 'A Grammar of Pichi'.

Research facilities

CLS research is becoming more and more empirical and experimental. As a result, facilities such as experimental laboratories, experimental equipment, powerful computers and sophisticated software, as well as enriched written, spoken, and multimodal sign language databases are increasingly part of the CLS environment.

Collaboration

- There is long-standing collaboration with a number of groups at the Max Planck Institute for Psycholinguistics and the Donders Institute for Brain, Cognition and Behaviour

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Dr. Asli Özyürek received the prestigious Starting Independent Researcher Grant from the European Research Council for her research on '*Language in our hands: Acquisition of spatial language in deaf and hearing children*'.



- Collaboration with the Meertens Institute with respect to the Netherlands Organisation for Scientific Research (NWO)-funded research projects 'Intonation in varieties of Dutch' (also involving Leiden University), the 'Dutch Bilingualism Database' (also involving the University of Tilburg), and 'Roots of Ethnolects'.
- The Typological Database System (also involving Utrecht University), the Surinam Creole Archive, and the Dutch Sign Language Database were established together with the University of Amsterdam.
- Collaboration with the Sint Maartenskliniek in Nijmegen and the OSTT Development Centre for Speech and Language Technology in a Communication Assessment project.
- Collaboration in the FP6 ACORNS project with the Royal Institute of Technology, Stockholm, the University of Sheffield, Technical University Helsinki and the University of Leuven.
- Collaboration in the Marie Curie International Training Networks SCALE and Bayesian Biometrics for Forensics (BBfor2) programmes with IDIAP Research Institute Martigny (Switzerland), RWTH Aachen (Germany), Saarland University (Germany), University of Edinburgh (UK), University of Sheffield (UK), Toshiba (UK), Philips Speech Recognition Systems/Nuance, Forensic Sciences Services (UK), TNO (NL) and Agnitio Voice Biometrics (Spain).
- The EURYI project (Dr Miriam Ernestus) involves collaboration with the Max Planck Institute for Psycholinguistics, the University of Glasgow (Rachel Smith), LIMSI, Paris (Martine Adda Decker), Université Paris 3 (Cecile Fougéron), University of Alberta (Harald Baayen), Northwestern University, Illinois (Janet Pierrehumbert), the University of Arizona (Natasha Warner), the University of Manitoba (Kevin Russell), and the

Hogeschool voor Wetenschap & Kunst (University College for Sciences and Arts) in Brussels.

- Collaboration with the University of Limpopo (South Africa), the University of Tilburg (the Netherlands) and University of Stellenbosch (South Africa) on the HACALARA project in the context of HIV/AIDS intervention programmes.

Research results

Dr Lotte Hogeweg finished her dissertation on the relationship between words and their meanings, which she approached from the perspectives of corpus research, language acquisition and modelling. Much of the thesis focuses on the Dutch discourse particle *wel*. This particle has many uses which seem very diverse at first sight, but are shown to have a core-meaning, namely denial of a negation. Strikingly, children first learn the stronger uses of *wel* before they acquire the weak use, despite the fact that the weaker version is much more frequently used by their parents.

Prof. Carlos Gussenhoven and his group exhaustively defined the grammar of Maastricht and both cognitive and perceptual explanations have been proposed for the 'system gaps' in this grammar. In perception research with English and Nigerian listeners, Nigerian English was shown to be drastically different from British English, having inalienable word melodies rather than sentence level pitch accents, despite a high degree of phonetic similarity. Persian was shown not to deaccent, but to reduce the pitch range after the focus constituent, a finding that runs counter to current descriptions of the language.

Dr Asli Özyürek, together with Dr Spencer Kelly (Hamilton USA) and Dr Eric Maris (Donders Institute), has shown that listeners are

faster and more accurate in identifying the meaning of a word when a speaker's gesture matches the meaning of that word. They found that when people gesture while speaking, this enhances comprehension compared to speaking without the hands. These results have implications for everyday communicative situations, such as in education (for both teachers and students), persuasive messages (such as political speeches and advertisements), and urgent situations (e.g. in first aid and aeroplane cockpit conversations).

Dr Erwin Komen, member of the Language in *Time and Space* group, has written a computer programme called Cesac, with which syntactically parsed corpora of Old English, Middle English and early Modern English can be further encoded. This will enable researchers to find a combination of syntactic constructions and information structure with a single search engine.

The ACORNS project, developed within the programme *Linguistic Information Processing*, coordinated by Prof. Lou Boves and Dr Els den Os, produced a novel memory architecture that integrates the most important aspects of biologically and psychologically inspired theories. In addition, ACORNS researchers showed how computational modelling can clarify issues in language acquisition that are difficult to investigate in behavioural experiments.

In the Veni project 'Avoiding the ham in hamster' Dr Odette Scharenborg completed the development of a novel model of human spoken word processing (Fine-Tracker).

In the MIDAS project Drs. Jort Gemmeke and Dr Bert Cranen extended the novel Sparse Imputation approach in such a manner that it can now handle large vocabulary continuous speech; especially for conditions in which the signal-to-noise ratio is low the novel approach outperforms existing approaches by a very large margin.

In the EURYI project 'Acoustic reduction in European languages' coordinated by Dr Mirjam Ernestus corpora of conversational speech in Spanish and Czech were recorded and transcribed. These corpora will be made available to the international research community. Research based on existing conversational speech corpora in Dutch and French have advanced scholars' understanding of the structural linguistic features that affect the degree of reduction of sounds, syllables and words in spontaneous conversational speech.

Dr Suzan Verberne completed her PhD thesis on answering *Why* questions. She has developed a novel technique for ranking candidate answers based on structural features of the natural language questions and text passages.

In the programme *Professional Communication* research on differences between cultures in the use and appreciation of communication media for recruitment and for finding a job, showed

that cultures differ in the media they use and that those cultural differences are related to cultural values. Surprisingly, in all countries the media HRM managers use to find personnel, differ greatly from the media people use to find jobs.

The Japanese NWO project 'Hurdles for advanced German and Dutch learners in achieving native-like competence in Japanese' came to an end. In two papers, Dr Keiko Yoshioka reported on how the use of the progressive depends on the type of situation in Japanese. Contrary to earlier hypotheses in the L2 literature, Dutch learners of Japanese turn out to be sensitive to this constraint, which was shown in information structure and eye movements.

Societal impact

Intercultural communication does not always proceed smoothly. Research on modality and politeness, on the different uses and acquisition of discourse particles in Dutch, on personal pronouns in the languages of the world, and on the role of animacy and space in language, may contribute to a better understanding of how language and communication work and thus help avoid miscommunication. For that purpose, Prof. Helen de Hoop and her group have published several online articles on optimal communication for a general audience.

Knowledge of information structure is the final hurdle for L2 learners in their efforts to acquire near-native competence in a global language such as English. By contrasting the information structure of present-day English with that of earlier times, when English was more like the other West Germanic languages, the NWO-funded research programme Syntax and Information Structure: Discourse Options after the loss of V2, highlights the differences between present-day Dutch/German and English, knowledge that is fed directly into the language skills courses in the English department and hence offers students concrete suggestions for improving their written English.

The Dutch Sign Language *Corpus*, developed by Dr Onno Crasborn and his group and published as an open access multimedia database in December 2008, has been further developed in 2009. The sign language research projects and many of the researchers were introduced to the deaf community at 'World Deaf Day', an annual national event that attracts many thousands of deaf people, parents of deaf children, and professionals working in deaf education. The website for the general public (www.ru.nl/gebarentaal) has been expanded.

Prof. Roeland van Hout was involved in societal organizations dedicated to dialect and regional languages and in discussions about the recognition of such languages as well as dialects and education.

Prof. Pieter Muysken participated in a committee meeting with members of the Dutch Parliament on the use of immigrant

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Key publications

Bosch, L.F.M. ten, hamme, H. Van, Boves, L.W.J. & Moore, R.K. (2009). A computational model of language acquisition: the emergence of words. *Fundamenta Informaticae*, 90(3), 229-249.

Craats, I. van de (2009). The role of IS in the acquisition of finiteness by adult Turkish learners of Dutch. *Studies in Second Language Acquisition*, 31, 59-92.

Crevels, E.I. & Muysken, P.C. (Eds.). (2009). *Lenguas de Bolivia, vol. 1 Ámbito andino*. La Paz: Plural editores.

Cucchiari, C., Neri, A. & Strik, H. (2009). Oral proficiency training in Dutch L2: The contribution of ASR-based corrective feedback. *Speech Communication*, 51, 853-863.

Fikkert, J.P.M. & Hoop, H. de (2009). Language acquisition in optimality theory. *Linguistics*, 47(2), 311-358.

Gullberg, M. (2009). Methodological reflections on gesture analysis in SLA and bilingualism research. *Second Language Research*, 25(4), 497-524.

Hämäläinen, K.A., Bosch, L.F.M. ten & Boves, L.W.J. (2009). Modelling Pronunciation Variation with Single-Path and Multi-Path Syllable Models: Issues to Consider. *Speech Communication*, 51, 130-150.

Havik, E.M., Roberts, L., Hout, R.W.N.M. van, Schreuder, R. & Haverkort, M. (2009). Processing Subject-Object Ambiguities in the L2: A Self-Paced Reading Study With German L2 Learners of Dutch. *Language Learning*, 59, 73-112.

Hoeken, H., Swanepoel, P., Saal, E.O. & Jansen, C.J.M. (2009). Using message form to stimulate conversations: The case of tropes. *Communication Theory*, 19(1), 49-65.

Hogeweg, L. (2009). The meaning and interpretation of the Dutch particle *wel*. *Journal of Pragmatics*, 41(3), 393-648.

Hornikx, J.M.A. & O'Keefe, D.J. (2009). Adapting consumer advertising appeals to cultural values: A meta-analytic review of effects on persuasiveness and ad liking. In C.S. Beck (Ed.), *Communication yearbook* 33 (pp. 38-71). New York: Lawrence Erlbaum.

Los, B.L.J. (2009). The consequences of the loss of verb-second in English: information structure and syntax in interaction. *English Language and Linguistics*, 13(1), 97-125.

Sanders, J.M. (2009). Causal connectives in Dutch biblical translations. In T. Sanders & E. Sweetser (Eds.), *Causal Categories in Discourse and Cognition* (Cognitive Linguistics Research [CLR], 44) (pp. 61-90). Berlin: Mouton de Gruyter.

Stassen, L.M.H. (2009). *Predicative Possession*. Oxford: Oxford University Press.

Vos, C. de, Kooij, E. van der & Crasborn, O.A. (2009). Mixed signals. Combining linguistic and affective functions of eyebrows in Sign Language of the Netherlands. *Language and Speech*, 52(2/3), 315-339.

Dissertations:	11
Scientific publications:	230
Professional publications:	58

languages in primary education. A resulting publication (with Folkert Kuiken) appeared in the Dutch teachers magazine *Didactief*.

The first of four volumes on the languages of Bolivia, *Lenguas de Bolivia* (Crevels and Muysken, eds.), was presented by Prof. Pieter Muysken to representatives of the Ministry of Education in La Paz Bolivia, in the Museum of Ethnography. Basic educational and literacy materials were prepared for several of these languages.

In the project BATS (Topic and Speaker Tracking in Broadcast Archives) technology has been developed that will support searching in the audio archives of the Flemish Public Broadcasting Corporation VRT.

The TM4IP project, in which Dr Nelleke Oostdijk and Dr Suzanne Verberne participate, is fully funded by a company that needs

improved tools for patent mining. It is expected that the knowledge gained in this project can also be exploited in a range of other domains where there is a need to find information effectively and efficiently.

The CLARIN-NL projects make valuable contributions to the development of novel research methods for the Humanities. The Veteran Tapes project is a showcase for these novel research methods in the fields of History, Anthropology and Communication. In addition, making oral history resources available to the general public will have an impact on awareness of the importance of historical events in contemporary society.

In two publications, questions have been raised about the effectiveness of communication strategies in HIV/AIDS campaigns in South Africa. In one publication, the potential gains as well as the

Director: Prof. Ans van Kemenade

Ans van Kemenade worked at the Universities of Utrecht, Leiden and the Free University Amsterdam before she was appointed a full professor of English Linguistics at Radboud University Nijmegen in 1999. Her research specialism is language variation and change, with special focus on the comparative historical development of the grammatical systems of Dutch and English. She has published two high-impact research monographs and is currently working on a new monograph. She has a distinguished editorial track record, including four books and a number of collections for prestigious publishers and journals. She has been Principal Investigator (PI) or co-PI of several research groups funded by granting agencies and is a member of various advisory boards and councils.



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considerable dangers of using intentionally non-explicit messages on billboards and in other mass media were identified, along with a theoretical framework that may guide empirical research which could influence the debate. In the other publication, the use and impact of slang in written mass media campaigns was studied. Again, the results of this study raise doubts about the potential benefits of such a strategy.

Studies on the differences between cultures in terms of the use and appreciation of communication media for recruitment are important for recruitment within the EU, as are studies on differences in annual reports written in English and their impact on stakeholders. For the European Commission study 'Promoting Language Learning and Linguistic Diversity', Dr. Marianne Starren has been asked to serve as an expert member for the Netherlands in a group studying 'Dubbing and Subtitling Needs and Practices in the European Audiovisual Industry' commissioned by EACEA/DG EAC/2009/01. In co-operation with SBS Luxembourg, Profs. Ton Dijkstra and d'Ydewalle are studying the potential of subtitling in film and television programmes to encourage and promote foreign language learning.

Future research

The following grants, which were obtained in 2009, will substantially strengthen research at CLS in the years ahead.

- Language in our hands: Acquisition of spatial language in deaf and hearing children, Özyürek. ERC Starting Grant. Period: 2010-2015.
- Linking lexical databases and annotated corpora of signed Languages (SignLinC), Crasborn. CLARIN-NL. Period: Jan-Dec 2010.
- Curation of Interview Data (INTER-VIEWS), Henk van den Heuvel. CLARIN-NL. Period: Jan-Dec 2010.
- A Distributed Lemmatizer for Historical Dutch (Adelheid), Hans van Halteren. CLARIN-NL. Period: Jan-Dec 2010.
- Transcription Quality Evaluation (TQE), Helmer Strik. CLARIN-NL. Period: Jan-Dec 2010.
- Automatic Annotation of Multi-modal Language Resources (AAM-LR), Lou Boves. CLARIN-NL. Period: Jan-Dec 2010.
- My Pronunciation Coach (MPC). STW Valorisation Grant, Helmer Strik, Catia Cucchiari, Liesbet Korebrits (Radboud in'to Languages), Pieter van Gelder en Bob Teurlings. (MYNT Technology). Period: 6 months in 2010. For the same project, an innovation voucher was obtained from SenterNovem and from Business Development Fonds van Stichting Gelder Kennis.
- Bayesian Biometric for Forensics (BBfor2). Marie Curie Initial Training Network, Lou Boves and David van Leeuwen.
- Language and Origin: The Role of Language in European Asylum Procedures: Exploratory Workshop of the European Science Foundation, Muysken with Verrips (De Taalstudio) and Zwaan (Centrum voor Migratierecht at the Radboud University Nijmegen), Period: April 22-23, 2010.