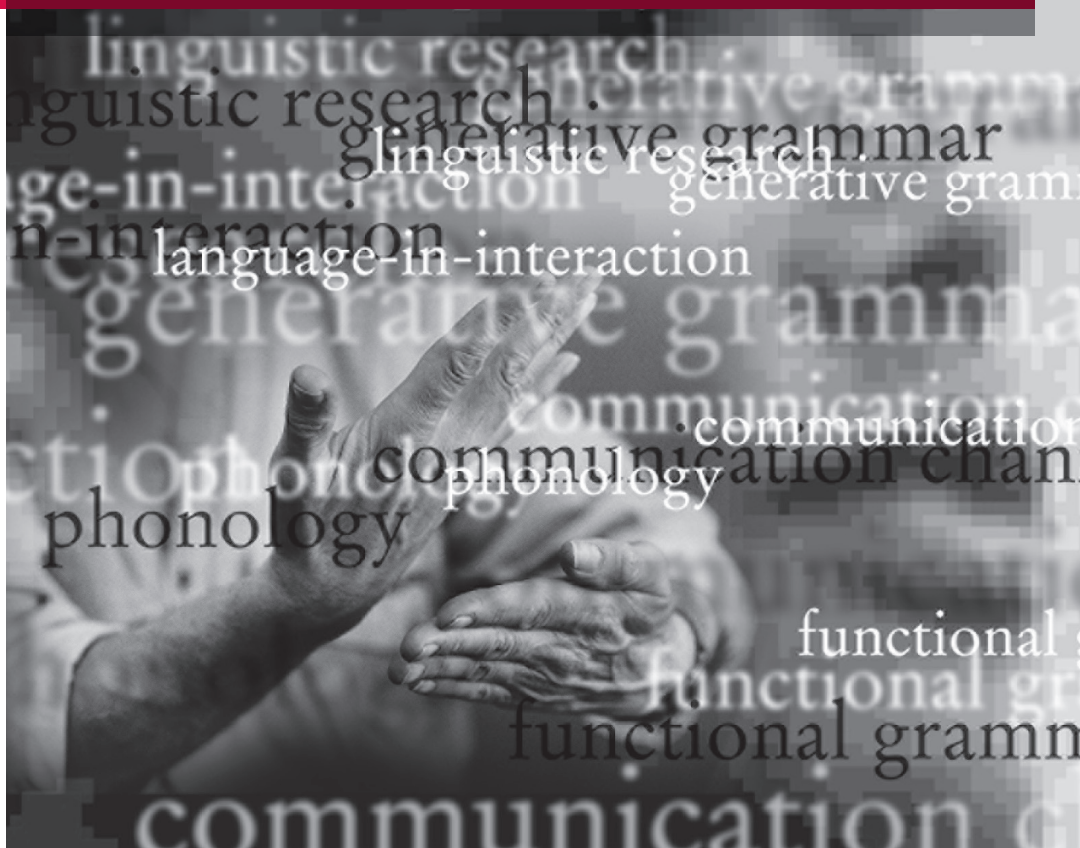# UNIVERSITY OF AMSTERDAM

ACLC

Faculty of Humanities
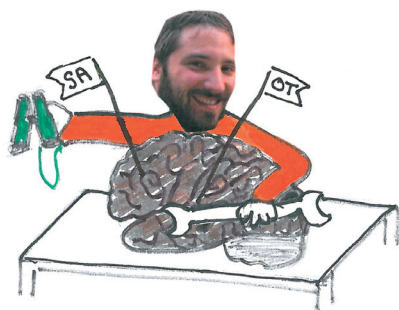Amsterdam Center for Language and Communication

Summary Annual Report 2010

FULL DIGITAL VERSION: WWW.HUM.UVA.NL/ACLC-JAARVERSLAG2010 FROM AUGUST 2011 ONWARDS

■ Interview with Tamás Bíró

Tamás Bíró is a postdoctoral researcher at the Institute of Phonetic Sciences of the ACLC.
He is working on his NWO-Veni project 'Efficient communication full of errors'.

Can you briefly describe what your research is about? Briefly?! The shortest version is: playing with Optimality Theory (OT) and with computer models, but such a description doesn't get your research financed. If I have to explain it in a way accessible to lay people, I would say that I investigate what the brain does if it has to do less well than optimal. If you speak quickly, your speech is full of errors you wouldn't make if you spoke slowly. Under time pressure your brain produces speech that is not optimal. I make computer models that do just that.

I use OT as a model that predicts what a correct grammatical form should look like. Then I use a technique called Simulated Annealing (SA) that searches for the optimal form. However, this search costs time, and if there is time pressure, the model will sometimes fail to find the optimal form.

The faster it has to run, the more errors it makes. In this way, OT is a model of competence and SA is a model of performance.

Can you imagine using the model for other aspects of cognition? Oh yes! Are you ready? I enjoy working with the model at least as much as working with language itself. I would like to use OT as a model of human cognition, and perhaps cognitive approaches to culture, religion… I am sort of betting that OT with SA is a general model of how the brain works so that other cognitive domains can be described by it. I enjoy stepping back and thinking not just about the questions about language and cognition, but also about broader philosophy of science.

Why do you do this? During my studies I was in physics as well as in linguistics. I enjoyed doing a bit of both; doing only one would have been a bit boring for me. This computational approach to linguistics gives me the opportunity to do a bit here and a bit there. Also, programming is fun, like Sudokus and puzzles. You can lose yourself in it.

Have you always wanted to be a scientist? Yes. Since the age of about 8, I would have said: "I want to become a mathematician". In high school I wanted to go into physics. When I was 18, a friend said: "Tamás, if you're good in math and you like languages, then you should become a linguist."

Can you imagine doing something else?
Hardly. Before coming to the Netherlands,
I applied for jobs like programmer, but it was
always difficult to convince the human resource
managers that I wanted to leave the academic
world. They felt I wouldn't stay with them for
very long if I had the chance to go back.

What would you like to achieve? I would
like to have a tenured position at a university
from which I can work on my theory. I would
like to have it accepted by more people. I have
one MA student now, so I have one "follower"
but perhaps a few more would be nice.

New, new, new…

Half of the more than 800 preschool
teachers in Amsterdam do not have
reached the language proficiency level in
Dutch which is required for that function.
(Kuiken)

What are the highlights of 2010? I had a
peer commentary on an article on OT and
kinship relations accepted in Brain and
Behavioral Sciences. This has made me more
optimistic about how my theory can be
applied. I also have developed this idea into a
workshop proposal for the Cognitive Science
conference, which has recently been accepted.
And of course, I am now supervising an MA
student and I became a member of the ACLC

New, new, new…

Individual differences in reading
comprehension can to a small extent
be accounted for by differences in
accessibility of semantic word knowledge.
(Cremer)

advisory board. It is interesting to read other
people's applications and see how they are
processed. For once I am sitting on the other
side of the table.

*What would you do with a Nobel prize,
given that you can spend it however you like?*
Well, I would use some of it to start a
foundation supporting the research of young
scientists, to help them overcome what I call
the "curse of postdocs". Namely, I am really
tired of moving from apartment to apartment,
from institution to institution, from country
to country. If I had the means, I would help
others (and myself) find a single place to
consider a permanent home.

■ Interview with Jan Hulstijn

Jan Hulstijn is professor of second language acquisition at the ACLC, in charge of the `Cognitive Aspects of Second Language Acquisition' research group.

Can you give a brief account of your research? The last couple of years I have been working on language proficiency. Language proficiency appears trivial – you tend to think of it as something that you put in a description of a person: Dutch proficiency: perfect, English proficiency: good, etcetera. But if you think about it, it appears to be less straightforward. The most fundamental issue related to it is that of the critical period. Why is it much harder for adult second-language learners to attain the level of proficiency that child second-language learners ultimately attain? To investigate that you need to define what proficiency is and think about what level of proficiency can ultimately be attained. Therefore we need a good definition of language proficiency. Another important issue is the relation to learnability. I propose that all native speakers (without language-related disorders) attain a certain level of basic proficiency and a theory of learnability needs to explain that. Individual variation resides in what I call "higher language cognition".

Of course, such a simple model does not render the "Truth", and I am definitely not going to defend it to the death, because Truth doesn't exist in science. A theory shouldn't be too plausible, because then everybody will agree with you, but it should not be too implausible either, because then it will be ignored. I think scientific theories should be mildly crazy: a fruitful theory should be attractively wrong.

How did you end up a linguist? Oh, if I could do things over, I wouldn't choose linguistics. If I were smart enough, I would become an engineer, so I could build something concrete. Building a bridge, now that would be fantastic...

Why do people have the career they have? My father thought I had two options: become a medical doctor or a clergyman. But he did accept that I ended up as a linguist. I studied Dutch language and literature, but I didn't

New, new, new...

Zebra finches weigh acoustic cues in the same way as Dutch human adults. *(Escudero)*

manage to finish because of these huge literature exams. Then in the early '70s I attended a course on Chomsky (which I officially wasn't allowed to attend) and then I thought: "Wow, this is interesting, now I know what I want". And this motivated me to finish those literature exams.

Is there something you still want to achieve? I still have two NWO-projects on language proficiency, and I hope to write a new project proposal with researchers at the Meertens institute. Another exciting thing I am doing is supervising a school teacher. School teachers can now get time off to do a PhD. Supervising PhD students is something I will continue to do after my retirement.

So you don't want to stop at retirement? Of course not! I am still having too much fun as a researcher. I cannot imagine doing no scholarly work.

How was 2010? One of the highlights was that a paper reporting the main results of one of our NWO project was accepted for publication. It can be frustrating how long it takes to get things published, but it is nice when it works. It gives you the feeling of "Mission accomplished". But as for highlights, for me, the best moment of every week is the lunch meeting of my research group. I always look forward to that. It's both a scientific and a social event, and it is very important, because research is the work of a group.

The final question: what would you do with a Nobel prize? I think linguistics should become interdisciplinary, so I would spend that bag of money on that. Narrow linguistics does not tell us enough about humans and human society. How do you encourage interdisciplinary research? By waving a financial carrot in people's faces. I think in that respect we are already moving in the right direction.

New, new, new…

Interactional details (e.g. laughter, silence, body language, shifts in tone or gaze) may crucially affect the course of events in engaging or frustrating the active involvement of learners.
(Bannink, van Dam van Isselt)

Of course, my wife and I wouldn't mind having a nice house on one of the canals, but I would be embarrassed if I bought it. One thing I would spend part of the prize on is student refugees. I used to teach Dutch as a second language to student refugees. In my time they came from Argentina and Chile. That is always something where money is needed.

■ Interview with Alla Peeters

Alla Peeters is a researcher at the ACLC, teaching Russian at the department of Slavic languages and cultures. Like all Russians she likes to be surprised by what life brings.

Can you give a brief account of what your research is about? There are two main areas that interest me the most. The first is the link between language and cognition. I want to investigate the role that spatial cognition plays in language and look at the different ways in which languages express relations between space and movement. The main question in my research is: Do we perceive and mentally interpret space and motion language-independently, or de we partition the world according to our language and thus acquire a world view in the way the language forces us to do. We conduct eye-tracking studies with participants with different native languages to see how certain spatial and motive relations are interpreted. Then we can also investigate whether they, as L2 speakers of another language, interpret the situations differently when we test them in this L2. The second area

involves the acquisition of morphological features in Slavic languages by children who learn this as a second mother tongue. Based on this research I am developing teaching methods to help these children acquire the features of rich morphological systems such as gender and grammatical case.

Have you always wanted to do this? Yes, language has always been my passion. When I was four years old in Russia, they introduced English lessons for the little ones in my school. This was so new; it was even broadcast on television. For me this was a great experience and I already knew at a very young age that I wanted to become a teacher of foreign languages. I speak different languages, and each of them gives me a different feeling and view on the world. My biggest ambition is to look at the world through a different pair of glasses every time I speak a different language. Language as a science appeals to me very much since it is such a lively field. It is dynamic, always carries something subjective in itself and has a strong human factor.

New, new, new…

Signing experience does not negatively impact the speech perception abilities of deaf children with a cochlear implant. *(Giezen)*

Can you imagine yourself doing something completely different? Medicine. There are many parallels with what I do now in the field of medicine. Both focus on human beings and are very dynamic – continually changing. In the same way that language has a million faces with every person speaking their own language, medicine has a million faces with every person having their own version of a certain disease.

How was 2010? This year we formulated a new project proposal for a PhD position on the acquisition of gender and case in Russian and Polish in monolingual and bilingual children and children with SLI. This proposal has been accepted so that was certainly one of the highlights of 2010. Besides this, I published the second part of my teaching method for bilingual children as well as a revision of a teaching method for Dutch learners of Russian.

What would you do with a Nobel prize, given that you can spend it on non-scientific things as well? First of all, I would not stop working. I want to work until I no longer can. It is what I enjoy doing and I want to keep developing new exciting projects, interact with students, learn about new things and explore technical research gadgets. With the money, I would love to buy a little house in the Russian countryside with a beautiful garden. I love gardening - working with my hands: digging in the soil, pruning plants,

New, new, new…

Grammatical gender, both in Dutch and in Romance, is vulnerable: it requires a certain quantity and quality of input at an early age.
*(Hulk & van der Linden)*

weeding, all of that. Ideally, I would work here all year long on my research and then in summer I would go to Russia to write and work in my garden.

■ Interview with Sophie ter Schure

Sophie ter Schure started her PhD project in 2010 within the university priority program Brain and Cognition. This is an interdisciplinary project, which makes her travel around between multiple offices, but at least one day a week she can be found at the ACLC.

Can you give a brief account of what your research is about? I am working on a project about category formation related to language, emotions and objects. My background is in linguistics, so I will focus mainly on the part about language. This can be investigated by looking at auditory processing and visual processing and I am interested in figuring out how, on the basis of visual and auditory cues, a category can be formed. The most interesting is to investigate this with people in the process of forming their first categories. So I will conduct experiments with babies, using for instance eye-tracking or near-infrared spectroscopy.

How is it to be working within such an interdisciplinary project? It is really inspiring. My advisors all come from very different backgrounds and traditions. Susan Bögels also works with babies, but these are more observational studies and therefore different from the techniques we aim to use in my project. Maartje Raijmakers is very much interested in visual categories, or actually, the learning process of learning any category, while Paul Boersma and I are more linguistically oriented. What is really interesting in this collaboration is that we as linguists sometimes make assumptions that are not immediately logical from the point of view of for instance psychology or pedagogy. This can be a real eye-opener.
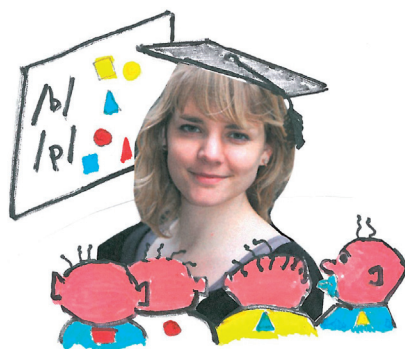
Have you always wanted to do this? I am a very curious person and I have always found language extremely interesting. Especially first language acquisition, it is such a miracle! It must be natural, but where does this come from? It really fascinates me. When studying at the UvA I developed this feeling that the ideas about innateness just cannot be true and this became even clearer to me when I studied in Edinburgh and started following a course on language evolution. Language simply cannot have descended into our heads as a god-given particle. In my project I hope to find a general learning mechanism that underlies category formation in language, emotions and objects.

Can you imagine yourself doing something completely different? I have always loved to study and everybody always thought I was going to end up in academia, but actually I also really enjoy doing practical things. This might be something typically West-Frisian, but I have had many jobs, since I was twelve years old. Working in the barn, on the field or as a cleaner. I really liked this: something is dirty, I clean it, and the reward is immediate. The same counts for cooking and baking. You start with nothing and reach your goal within the hour. Academia on the other hand takes a long time. Besides my work as a PhD, I am a musician. I learned how to play mbira, a Zimbabwean thumb piano, and I work for the Memo Foundation, which brings performing arts to babies and toddlers in nurseries and schools. This is a very rewarding job and absolutely great to do. And I sing in two folk bands as well.

How was 2010? It was a great year! I graduated this year in January and I really enjoyed working on my MA thesis. When I finished I was quite happy to spend my time traveling, making music and writing, and then suddenly Paul Boersma contacted me about this project. I did not think I had a chance, because I only met about six of the twelve requirements, but here I am!

What would you do with a Nobel Prize, given that you can spend it on non-scientific things as well? They say money doesn't make you happy, so I would donate it. I would try my best to find a very useful charity. Maybe something that could improve education. Currently it happens too much that children are labeled in schools. Whether you are labeled "the straight-A girl" or get the dunce stamp, it puts you apart from the rest and people suffer from that for the rest of their lives. Everybody should be assessed on their merits and allowed to feel equally worthy in society. I would support any initiative that could bring this about.

New, new, new…

Verbal inflection and gender assignment remain problematic in children with Specific Language Impairment even at age ten and older.
(Baker, de Jong, Weerman)

■ What does the ACLC do?

The Amsterdam Centre for Language and Communication (ACLC) is a research institute for linguistic research within the Faculty of Humanities at the University of Amsterdam. Language is part of the cognitive system of human beings. Almost every child can learn a language effortlessly despite the variation that the languages of the world display. What makes a language learnable? What are the limits on variation in languages across the world? The ACLC aims to come up with answers to these central questions in linguistics. In doing so the ACLC also deals with many socially relevant topics such as language development in children and adults, multilingualism, language disorders in children, sign languages of the deaf, and new and endangered languages.

■ Scientific Output in 2010

Refereed journal articles	51
Non refereed journal articles	10
Refereed book chapters	51
Non refereed book chapters	14
Books	5
Books edited	19
PhD theses	5
Other publications	23
Lectures, posters, reviews	267

■ Staff in 2010 (in fte's research time)

	Tenured	Non-tenured
Full professors	2.74	0.72
Senior lecturers	2.08	-
Lecturers	5.91	-
Post-docs	-	9.80
PhD candidates	-	15.70
Total research staff	*10.73*	*26.22*
Supporting staff	1.20	-

■ A choice of publications in 2010 (ACLC authors in boldface)

■ **Aboh, E.O.** ed. (2010). *DP-internal information structure. Lingua* 120.4 (special issue).

■ **Beinum, F.** van & Hullenaar-Doppen, L. van 't (2010). *Babybabbels: methodiek voor het beschrijven van vroege spraakontwikkeling.* Leuven/Den Haag: Acco.

■ **Escudero, P. & Wanrooij, K.E.** (2010). The effect of L1 orthography on non-native vowel perception. *Language and Speech* 53.3, 343-365.

■ **Giezen, M.R., Escudero, P. & Baker, A.** (2010). Use of acoustic cues by children with cochlear implants. *Journal of Speech, Language, and Hearing Research* 53.6, 1440-1457.

■ **Jong, J. de** (2010). Notes on the nature of bilingual specific language impairment. *Applied Psycholinguistics* 31.2, 273-277.

■ Jongmans, P., Wempe, T.G., Tinteren, H. van, **Hilgers, F.J.M., Pols, L.C.W.** & As-Brooks, C.J. van (2010). Acoustic analysis of the voiced-voiceless distinction in Dutch tracheoesophageal

speech. *Journal of Speech, Language, and Hearing Research* 53.2, 284-297.

■ **Koeneman, O.** (2010). Verb movement in Germanic and Celtic languages: a flexible approach. *Lingua* 120.2, 210-231.

■ **Rozendaal, M. & Baker, A.** (2010). The acquisition of reference: pragmatic aspects and the influence of language input. *Journal of Pragmatics* 42.7, 1866-1879.

■ **Woidich, M.** & Behnstedt, P. (2010), *Wortatlas der arabischen Dialekte, Band I: Mensch, Natur, Fauna und Flora.* Leiden: Brill.

■ **Zeijlstra, H.** (2010). Emphatic multiple negative expressions in Dutch. *The Linguistic Review* 27.1, 37-73.

■ Finances (in k€) in 2010

Budget 2010	2392,97	100.0%
UvA contribution	1334,34	55.8%
External	1058,34	44.2%

■ Research groups and co-ordinators in 2010

The ACLC is organised in research groups. These are of different sizes and some focussed on an externally funded project. They are approved for a limited period and regularly evaluated in order to achieve flexibility in the organization.

	Research group	Co-ordinator(s)
1.	Bidirectional Phonology and Phonetics	Paul Boersma
2.	Cognitive Approaches to Second Language Acquisition	Jan Hulstijn
3.	Comparative Slavic Verbal Aspect (and Related Issues)	Janneke Kalsbeek & René Genis
4.	Crosslinguistic Semantics	Frank Veltman (ILLC)
5.	DP/NP: structure, acquisition and change	Harry Perridon & Petra Sleeman
6.	Functional categories in analytic languages (SinoKwa)	Enoch Aboh
7.	Functional Discourse Grammar	Evelien Keizer
8.	Grammar and Cognition	Anne Baker, Fred Weerman & Hedde Zeijlstra
9.	Iconicity	Olga Fischer
10.	Language Creation	Norval Smith
11.	Modelling the evolution of language	Bart de Boer & Jelle Zuidema (ILLC)
12.	Multiparty Discourse and Anthropology of Education	Anne Bannink & Jet van Dam van Isselt
13.	Oncology-related communication disorders	Frans Hilgers
14.	Revitalizing older linguistic documentation	Otto Zwartjes
15.	Sign Language Grammar and Typology	Anne Baker, Roland Pfau & Joke Schuit
16.	Tundra Yukagir	Cecilia Odé