

# ILIC Magazine

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ILIC MAGAZINE  
INTERVIEW KAREL VAN DER TOORN  
PRESIDENT OF THE UVA

## 'A university is not a cookie factory'

Karel van der Toorn has high ambitions for the UvA. The university has to become itself an international institution that inspires excellence. An extra effort is needed to stimulate interdisciplinary research.

Almost ten years ago, when Karel van der Toorn was still director of the UvA, Magazine was the first to interview him. These other two interviews, however, are more recent. The first is from 2006, the second from 2008. The UvA has not only been successful in its internationalisation strategy, but also in its research strategy. The university has a strong reputation in the field of interdisciplinary research. The UvA has a strong reputation in the field of interdisciplinary research. The UvA has a strong reputation in the field of interdisciplinary research.

In this issue amongst others:

A librarian's detective story

Inspiring research: Leigh Smith

An interview with Karel van der Toorn, President of the UvA



## A text in the margin

An important theme in the history of the UvA is the role of the library. The library has been a central part of the university since its founding in 1633. The library has been a central part of the university since its founding in 1633. The library has been a central part of the university since its founding in 1633.

PHOTO: UVA

## INSPIRING RESEARCH: LEIGH SMITH The Circularity Of Tempo Curves



Leigh Smith is a mathematician who has spent most of his career at the University of Cambridge. He has worked on a variety of problems in the theory of dynamical systems, including the study of the circularity of tempo curves.

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Foreword  
 ILLC  
 MAGAZINE

Dear friend of the ILLC,

You have before you the tenth instalment of the ILLC magazine. The first ever instalment, which sadly is not yet a valuable collectors' item, featured an interview with Karel van der Toorn. Back then he was not president of the University, but now he is, and we are happy he gave us an interview again this year.

After ten years, and through eleven editors, the magazine has acquired an established shape (if a variable weight), and certain traditions. You will find what can now be called "regular" features. These include Inspiring Research (though Leigh Smith breaks with tradition by citing his senior colleague within the Music Cognition Group), and alumni interviews (this year with recent PhD graduate and former editor of this organ, Merlijn Sevenster, as well as with Eyal Hurvitz who graduated from the MoL ten years ago).

This year's guest column is, un-traditionally, related to academic themes at the institute: Henk Verkuyll thoughtfully discusses the differences in approach between logicians and linguists.

Of the two remaining features of the kind one might expect, one presents the largest single research project in the Institute, GLoRiClass; and in the other, Henkjan Honing details his team's entry to the prestigious *Academische Jaarprijs*.

In addition to these pieces we were very lucky to receive an unexpected contribution from Theo Janssen, who made a surprising and unconventional discovery while going about his research in the philosophy library.

Another break with tradition will be the ILLC's move in the coming year to the Science Park. In a nod to sentimentality, the traditional back-cover photograph of some current masters and PhD students features the Euclides building, an eye-sore that might nonetheless be sorely missed.

We would like to thank all those who helped out with this year's magazine: all the contributors, including Peter van Emde Boas and Yanjing Wang for photographs, and Ingrid van Loon for much-needed organisational support.

The editors,  
 Jacob Vosmaer and Jonathan A. Zvesper

Announcements

**Projects awarded September 2007 - August 2008**

**Two NWO VENI awards to Raquel Fernández and Alessandra Palmigiano**

• Within the Division of Humanities: Raquel Fernández Rovira for her project 'Change and Coordination via Dialogue Interaction', and within the Division for Exact Sciences Alessandra Palmigiano for her project 'Dualities for quantales: a spatial understanding of noncommutative topology'. Both receive funding (€208,000) for a three year appointment as postdoctoral researcher at the ILLC.

**NWO Vrije Competitie (Free Competition) project (€494,974) to Remko Scha**

• Remko Scha's project proposal "Towards an experience-based model of early syntax acquisition" is awarded in the Vrije Competitie round by NWO. With this subsidy two PhD students can be appointed, one in Utrecht, one in Amsterdam.

**NWO Vrije Competitie project (€326,800) to Frank Veltman**

• NWO are supporting a project entitled "On vagueness — and how to be precise enough". These funds will be used for material costs over a four-year period; Harald Bastiaanse will benefit from this in order to pursue research into vague expressions in natural language.

**NWO Vervangingsubsidie (€25,000) to Henkjan Honing**

• NWO has awarded a Vervangingsubsidie to Henkjan Honing for his research on "Music Matters: on music and the cognitive sciences." This grant enables him to be replaced for (part of his) teaching and administrative duties for a period of 12 months.

**Four projects in the Eurocores program LogiCCC**

• Nine projects were selected in the first round of this program, and ILLC is a partner in four of these. Each will bring the ILLC a PhD student or postdoc.

*Title: Logic for Interaction (LINT)*  
*Principal investigators ILLC:*  
 Johan van Benthem, Jouko Väänänen

*Partners:* University of Amsterdam, The Netherlands  
Göteborgs Universitet, Sweden (coordinator)  
Technische Hochschule Aachen, Germany  
University of Tampere, Finland

*Title:* Computational Foundations of Social Choice (CSFC)

*Principal investigator ILLC:* Ulle Endriss

*Partners:* University of Amsterdam, The Netherlands  
Heinrich-Heine-Universität Düsseldorf, Germany  
Bilgi University, Istanbul, Turkey  
The Hebrew University Jerusalem, Israel  
Ludwig Maximilian Universität München, Germany (coordinator)

*Title:* The Dialogical Foundations of Semantics (DiFoS)

*Principal Investigator ILLC:* Benedikt Löwe

*Partners:* University of Amsterdam, The Netherlands  
Universidade de Coimbra, Portugal  
Eberhard-Karls-Universität Tübingen, Germany (coordinator)

*Title:* Vagueness, Approximation and Granularity (VAAG)

*Principal investigators ILLC:* Robert van Rooij and Frank Veltman

*Partners:* University of Amsterdam, The Netherlands  
Humboldt Universität, Berlin, Germany (coordinator)  
Lunds Universitet, Sweden  
University of Zagreb, Croatia

### Prizes and Awards September 2007 - August 2008

#### Paul Vitanyi

- On Friday September 7 there was a special ceremony at CWI in honor of Paul Vitanyi. In a very entertaining afternoon session three famous mathematicians/computer scientists gave a talk more or less related to Paul's work: Hendrik Lenstra, Turing award winner Andy

Chi Chi Yao, and the founder of NP-completeness theory Leonid Levin. At the end of the afternoon Paul was knighted: he was awarded knighthood in the order of the "Nederlandse Leeuw", which is the highest ranking decoration that is not military. The Nederlandse Leeuw is awarded for personal achievements and is considered more valuable than other rankings awarded for contributions to society.

### ESSLLI best student paper award to Thomas Icard III

- Master of Logic student Thomas Icard III won the award of the Best Student Paper in the Oral Session at the ESSLLI summer school of 2007 with his paper "Towards An Alternative Proof of Solovay's Arithmetical Completeness Theorem" based on a project advised by Joost Joosten.

### Barbara Plank wins the IBM & KRDB Best Thesis Award 2008

- Barbara Plank (thesis main supervisor: Khalil Sima'an) wins the IBM & KRDB Best Thesis Award 2008 for the best thesis on "Language and Communication Technologies" for the MSc thesis carried out within the European Masters Program in LCT jointly supervised at the UvA and the Free University of Bozen-Bolzano and entitled "Sub-domain driven parsing".

### Gideon Borensztajn awarded CogSci'2008 prize

- Gideon Borensztajn is a graduate of the master Cognitive Science and PhD student at ILLC. He has won the prestigious international CogSci prize for the best paper on Applied Cognitive Modeling.

Together with co-authors Jelle Zuidema and Rens Bod Borensztajn wrote the paper: "Children's grammars grow

more abstract with age - Evidence from an automatic procedure for identifying the productive units of language." The prize will be handed out in July 2008 during the Cognitive Science Conference 2008 in Washington D.C. It is a very competitive prize and from 1000 submissions only 4 papers were selected for an award.

### Nina Gierasimczuk wins Polish Award for Young Researchers

- Nina Gierasimczuk, PhD student at ILLC, has won the "Foundation for Polish Science Award for Young Researchers START 2008". This stipend is awarded "to the most promising young researchers (up to the age of 30) whose achievements have been already recognised."

### Personnel arrived (excluding PhD students, see page 18); September 2007 - August 2008

- Peter van Ormondt, administrator, as of July 2007
- Catarina Dutilh-Novaes, Faculty of Humanities, postdoc, as of September, 2007
- Katrin Schulz, Faculty of Humanities, postdoc, as of November 2007
- Emar Maier, Faculty of Humanities, postdoc, as of January 2008
- Stephane Airiau, Faculty of Science, postdoc, as of May 2008
- Sebastiaan Terwijn, Faculty of Science, postdoc/lecturer, as of August 2008

### Personnel left; September 2007 - August 2008

- Marjan Veldhuisen, as of September 2007
- Karen Kwast, as of February 2008
- Levan Uridia, as of April 2008
- Maarten Coolen, as of June 2008

### PhD defenses; September 2007 - August 2008

- 12 October 2007, Yoav Seginer: Learning Syntactic Structure
- 2 November 2007, Katrin Schulz: Minimal Models in Semantics and Pragmatics. Free Choice, Exhaustivity, and Conditionals
- 26 February 2008, Olivier Roy: Thinking before Acting: Intentions, Logic, Rational Choice
- 26 February 2008, Fenrong Liu: Changing for the Better: Preference Dynamics and Agent Diversity
- 27 February 2008, Stephanie Wehner: Cryptography in a quantum world
- 25 June 2008, Erik Rietveld, Unreflective Action: A Philosophical Contribution to Integrative Neuroscience

INTERVIEW WITH KAREL VAN DER TOORN,  
PRESIDENT OF THE UvA

# ‘A university is not a cookie factory’



photographer: Dirk Gillissen

Karel van der Toorn has high ambitions for the UvA. The university has to reinvent itself as an international institution that rewards excellence. An extra effort is needed to stimulate interdisciplinary research.

Almost ten years ago, when Karel van der Toorn was still dean of the Faculty of Humanities, he spoke to ILLC Magazine about the vulnerability of interfaculty institutes. ‘They often find themselves in something of a no man’s land’, he said. A lot has changed since that interview in 1999. The UvA has adopted the bachelor and master system and is reinventing itself as an international university, competing with Harvard and Yale rather than with Leiden and Groningen. More and more, education will be organized in ‘schools’ and ‘colleges’ such as the Amsterdam Business School and the future Amsterdam University College.

Van der Toorn rose through the ranks of the university. In 2006 he became president. In his office in the university’s centre of power, the Maagdenhuis, Van der Toorn remains loyal to his words of so many years ago. ‘Interfaculty institutes run the risk of becoming the orphans of the UvA. In a university that is organized along the lines of faculties, nobody feels responsible for institutes that do not belong to a single faculty. The ILLC was for a long time in this

vulnerable position, just like the International School for Humanities and Social Sciences (ISHSS). I think it is wise that the ILLC and other interfaculty institutes now fall under the responsibility of one faculty.’

Another threat to interfaculty institutes may be the distribution of the UvA faculties over four campuses: one in the inner city, Roeterseiland, Science Park, and AMC. This will not make it any easier for Science- researchers to consult with their colleagues in Humanities. Van der Toorn admits that distances between faculties will increase, but claims the division is inevitable: ‘It was either this, or fragmentation of faculties over different locations. We have chosen concentration over fragmentation. I don’t think that the physical distances between faculties stand in the way of cooperation. The Faculty of Science and the AMC have been working together in the fields of life sciences and systems biology with great success for some years now.

Still, I agree that we have to make an extra effort to ensure and stimulate interdisciplinary research. I sometimes dream of an Amsterdam Institute of Advanced Study, a place

where scholars and scientists from different backgrounds can spend a sabbatical devoted to an academic project of their own choice. A professional staff will pamper them and students will assist them in their research. There is only one simple rule: guests of the institute must spend their lunch break together. Conversation follows naturally.'

Van der Toorn's brainwave does not come out of the blue. He visited the Netherlands Institute for Advanced Study (NIAS) in Wassenaar on several occasions and was impressed by the level of conversation between academics of widely varying fields. Nias is known for inviting writers-in-residence, a practice that appeals to Van der Toorn: 'The university is not just a place for reflection, but also a creative centre. To my taste, there is too much separation between the sciences and the arts. The exchange between the two can be very interesting. The UvA does not have writers-in-residence like Delft University and many American universities, but together with Fonds voor de Letteren and Athenaeum bookstore we have established a 'European House for Writers' that offers foreign writers a three-month stay in Amsterdam.'

### Global ambitions

The international ambitions of the UvA are high. Van der Toorn vows that he wants the UvA to be up there in the 'top forty' of international universities, competing with the American Ivy League, Oxbridge, and the newly established top-institutes in Asia. At the same time, he stresses the importance of the UvA as a 'city university'. Global ambitions and local roots are not at odds, he says: 'Amsterdam is a cosmopolitan city. In no other city in the world are so many languages spoken. It is only natural for the UvA to have the same cosmopolitan character. A large number of our staff are foreigners, and a growing number of our students - though

not enough - spend part of their study abroad.'

Van der Toorn tells of a well-known Dutch brewery whose executives were worried about conserving the 'Dutch culture' of the company because more than half of their staff consisted of foreigners. The UvA-president does not share their concern: 'The American example of bachelors, masters and colleges is followed by universities all over the world. The UvA is no exception. The US have set the standard for scientific research and higher education. In that sense we are moving towards an international academic culture. However, it does not mean that we are shedding our identity as a Dutch university.'

Dutch universities share the egalitarian culture of Dutch society as a whole, Van der Toorn thinks. 'Students from other European countries are often surprised of the lack of hierarchy at our universities. Being on a first-name basis with their professors is new to them. In Germany and Belgium, professors are figures of authority. As a student, you do not vent your opinion unless you have studied all the available material and are a hundred percent certain of what you are going to say. It is an academic culture that greatly values footnotes. In Great Britain, academic culture is much more informal. We are somewhere in between. Dutch students are taught to be independent and speak their mind.'

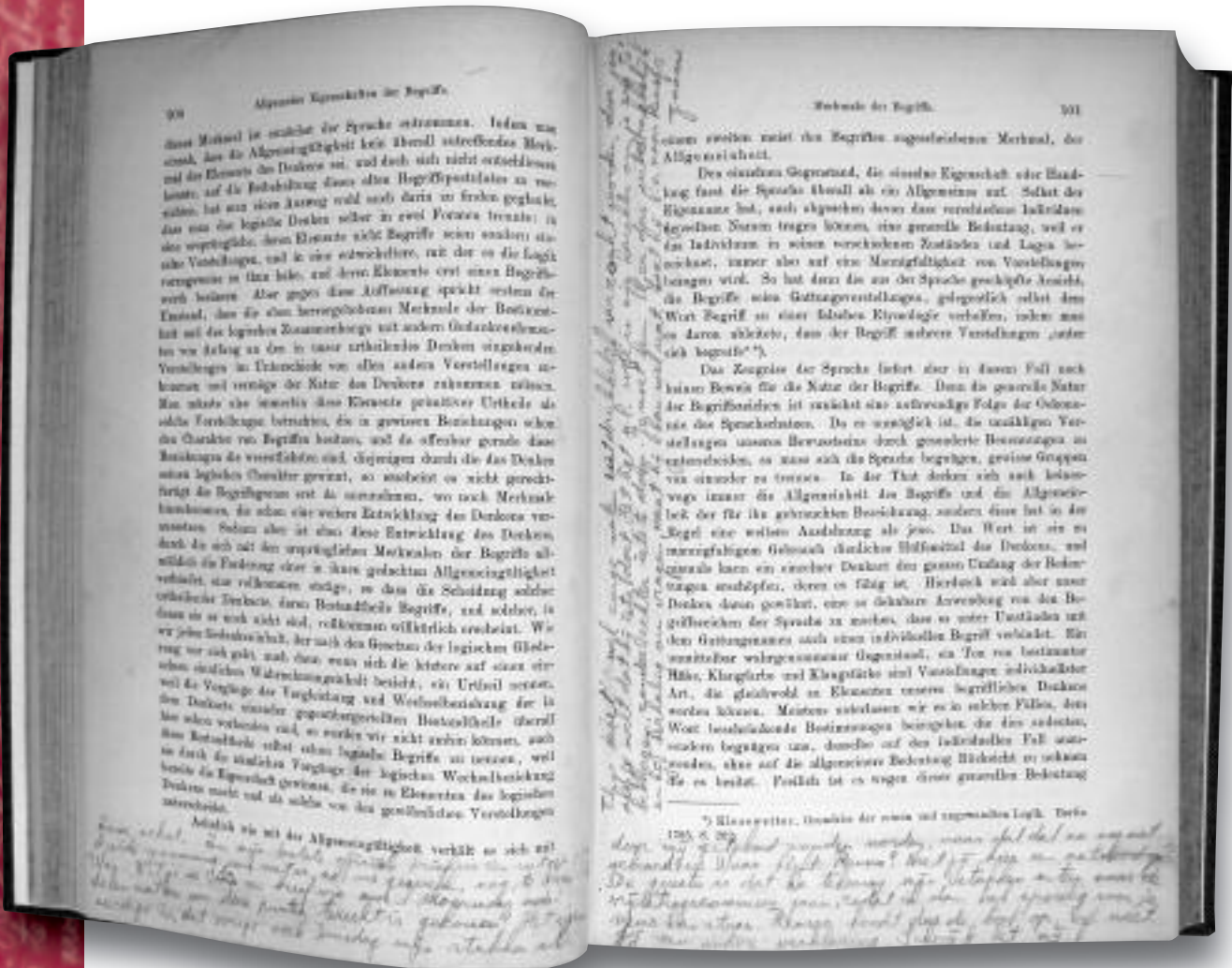
The downside of the Dutch love for egalitarianism is its zeal for achieving consensus. Sometimes, that makes it difficult to take radical decisions, says Van der Toorn: 'We have instituted a new policy that rewards research groups that are doing exceptionally well ('zwaartepuntenbeleid'). This goes against the grain of Dutch egalitarianism. In some quarters, eyebrows were raised. That is the weakness of Dutch universities; in our academic culture, it takes courage to reward excellence.'

### Moral duty

Another aspect of Dutch academic culture that needs rethinking is the tradition of fully state-sponsored universities. 'A great tradition,' says Van der Toorn, 'but these days, state sponsorship is not enough. Dutch universities are experiencing difficult times. We have more students than ever before and we lack the means to provide them with the standard of excellence that we aspire to. Government spending on education and science is not sufficient.' Van der Toorn appeals to UvA-alumni and the local business community for help. He hopes that companies and wealthy individuals are willing to sponsor scholarships - 'Out of a sense of moral duty and self-interest'. Naming a university institute after a sponsor is also within the bounds of possibility, says Van der Toorn: 'Tata Business School, why not? I don't see the objection. What is 20 million to the Tata Group?'

The fear of some academics that universities will be run like companies is unwarranted, says Van der Toorn. 'A university is not a cookie factory. Academic culture thrives on inspiration and curiosity, not profit. Yet, at the end of the day, our success is measured in quantitative terms. What counts is the number of diplomas and publications that we "produce." It is inevitable that this leads to the professionalization of the management of universities. This process has been going on for some time. I am convinced that we can strike a balance between a business-like approach and the culture of inspiration and curiosity that is at the heart of all science. It is a fallacy to believe that those two cultures are at odds.'

*With thanks to Johan van Benthem*



photographer: Jacob Vosmaer

# A text in the margin

An important theme in my research is the principle of compositionality of meaning. This principle says that the meaning of a compound expression is a function of the meanings of its parts. It has a counterpart: the principle of contextuality, which says never to ask for the meaning of an expression outside the context of a sentence. I have investigated the history of these principles. It turned out that in the second half of the 19<sup>th</sup> century in Germany there was a great deal of interest in the analysis of thinking and reasoning. The discussion was guided by the issue of what is primary: do we grasp thoughts and discern concepts within them, or are concepts primary and do we

form thoughts out of these. Later on, these ideas grew into principles.

Amsterdam is a good place to study this subject: the university owns a lot of relevant books from that period. I started my investigations concerning the origin of the principles with a book by Wilhelm Wundt: *Logik. Eine Untersuchung der Principien der Erkenntniss und der Methoden der Wissenschaftliche Forschung* (three volumes of 650 pages each). Although the title is *Logik*, it contains a lot of philosophy, psychology and linguistics. In those days, they were not yet separate disciplines, they would emerge from philosophy. Wundt is nowadays

completely forgotten as a logician, but is still honoured as the founding father of psychology. The copy of the book by Wundt was studied extensively: it has many underlinings, signs in the margin, and some notes which express some scholarship (e.g. 'Leibniz lays emphasis on the concepts'). However, I will not report here on the contents of the book, but on the remarkable texts that I found in the margin.

On page 100 (evidently not an arbitrary number) of the first volume of Wundt's publication a letter (in Dutch) was written around the printed text. This letter is written by another hand than the comments on the book. *Darling. In my last official letter an extensive*

*enumeration is given of what, after our talk, still has to be done. [...] It is remarkable, that already Tuesday last week my documents would be signed by me, but that has not happened yet. [...] The issue is that after signing, my documents immediately go to the release committee, so that I may stand very soon before you. Renses kept the matter up, or do you know another explanation? Write this to me.*

It is a letter by someone who seems to be in prison, is in a negative mood, and is trying to be released. The prison, however, seems not to be an ordinary one, because on p. 105 someone else (another hand) writes in English: *Do'nt [sic] try to escape for they shoot.*

The book under discussion does not contain other messages. In order to find out more about this story I investigated several more books by Wundt, and in two of them a letter is written. In the second volume of the publication mentioned above, a rather desperate letter is written. *I might be in error, but I have the impression that you already have a job, maybe with the hated purification committee. It is however difficult to assume that you are that sneaky. [...] Forgive me, darling, that I have such bad premonitions, and tell me in a thick letter how your life is going [...]. Inform me as well about the question of the bars of gold.*

The phrase *with the hated purification committee* [Dutch: *bij de gehate zuivering*] gives an indication about the situation. During the Second World War (1940-1945) the Netherlands were occupied by the Germans. Most people just tried to survive in the difficult situation of war; few eventually came to some form of active resistance. But it also happened that people behaved inappropriately. Some took advantage of the situation and acquired possessions, others helped the Germans in some way or the other, some were members of the political party that supported the Germans (the NSB - these were considered as quislings), and some went as far as to become members of army units that supported the Germans in their fight against

Russia (with the intention to save Europe from communism). After the Second World War the persons suspected of any form of misconduct were put into internment camps, while it was investigated whether they were collaborators, traitors, quislings, or just criminals, or whether their name could be purified of any blame. This was done by the *zuivering* (the *purification committee*).

The letter ends with a piece of practical advice. *Darling, never hand over parcels to persons wearing a uniform, because then they are checked thoroughly. Only to detainees (with a white band).*

Also the third volume has a letter, again on p. 100. It starts with several directives. *Write everything, don't you withhold your troubles. How is it with your tranquilizing drink? Do you do everything I ask you, and do you read my letters thoroughly? Well, darling, answer me soon in Indiv. Psychol.* The letter ends with a first name as signature: *Joopje*. Furthermore a reference is given to p.150, and that part of the letter gives more details. *[...] Lawyer Honig is appointed as head of the camp 'da Costa Street'. Let either Thijs or lawyer Smeets get in touch with him. He is a man with a feeling for justice. Make your own choice who could go best. Thijs or S. Let them emphasize to Honig especially that I am kept innocently, only under suspicion of having signed a questionnaire. In this questionnaire (that is not a registration) only some questions are asked, which certainly do not prove that someone has been a member. This questionnaire is their only evidence, whereas all further enquiries had a negative result (according to Renses himself). So I am kept here innocently, with more than insufficient evidence.*

This fits with our assumption, the author of the letters is suspected to be member of some German-friendly organisation. But who is this person?

I asked the librarian for more information. How did the library obtain these books, who was the previous owner? It would be interesting to know which other

books were in the same package; they might contain letters as well. Unfortunately, the librarian could only tell me that the books were in their possession already in 1970; other information was not available. However, I have the name of the owner of the books: it occurs on the title pages of two of them. It is a rare name (*A.C.J.A. Greebe*). The name occurs in the library catalogue: he was born in 1881, and has published on Dutch literature (e.g. a reconstruction of the 'Mathilde cyclus' of the romantic Dutch poet J. Perk). The handwriting of his name seems identical with the handwriting of the letters. What might raise some doubts is that the signature used in the letter is *Joopje*, whereas only his third given name (Johannes) can be associated with this signature, so maybe it was someone in his neighbourhood (brother).

Summarizing: a candidate author of the letters is found, and his internment is explained.

This story shows that it can be unexpectedly exciting to study old books; a Latin proverb says: *habent sua fata libelli* (books have their stories). They do.

Theo Janssen

#### Wilhelm Wundt.

*Logik. Eine Untersuchung der Principien der Erkenntniß, under der Methoden wissenschaftliche Forschung.*

1 Erster Band: *Erkenntnisslehre.* Stuttgart. Verlag von Ferdinand Enke. 1893.

2 Zweiter Band: *Methodenlehre. Erste Abteilung. Allgemeine Methodenlehre. Logik der Mathematik und der Naturwissenschaften.* Stuttgart. Verlag von Ferdinand Enke. 1894.

3 Zweiter Band: *Methodenlehre. Zweite Abteilung. Logik der Mathematik und der Naturwissenschaften.* Stuttgart. Verlag von Ferdinand Enke. 1895.

# Logician or linguist, what makes the difference?



Yet in spite of the difficulty of seeing borders, especially in those cases where linguists also have had a mathematical training, it seems appropriate to see Hans Kamp as a logician and Barbara Partee as a linguist, and to see Dag Westerstahl as the logician and Ed Keenan as the linguist in their joint contribution to the *Handbook of Logic and Language*. If formal semantic work is excellent, it shouldn't matter where the border is, but yet it remains an intriguing question: can one escape from the mental setting of a discipline? I ask this because in my Utrecht period I had PhD-students coming from Cognitive Artificial Intelligence (CKI) and from the Faculty of Humanities both extremely apt in formal techniques, but nevertheless the CKI-students were less prepared to see the wonderful subtleties of language whereas the linguists were less prepared to go all the way down to the treasures of formal work.

Let me simplify this diplomatically quite delicate topic by focussing on the format of the

Formal semantics of natural language has been developed into a prototype of successful interdisciplinary cooperation between two disciplines each having their own history and their own identity. In doing formal semantics for the scholar at work the borders between the two disciplines sometimes become quite faint, however, especially in the domain of generalized quantification and categorial grammar. One could easily be tempted to reduce the differences and claim that it is hardly possible to say whether a research proposal about words like *small*, *many*, *fairly* and *around* was written by a logician or a linguist.

interpretation function  $\llbracket \cdot \rrbracket$  which applies to an expression  $u$  (a morpheme, a phrase, a sentence) to yield a value  $v$  (an individual, a set, a truth value, or some other (mass or abstract) value) in a domain of interpretation. The idea is then that the difference between the two disciplines has to do with a different view on the structure of  $u$  and the structure of  $v$ . Which one comes first? Could one say that in any application of this function  $\llbracket u \rrbracket = v$  a linguist is bound to be more interested in  $u$  and the logician in  $v$ ? But this triggers the question: 'What does it mean to be more interested in  $u$  than in  $v$ '? An answer seems to be that logicians try to get an hold on  $v$ -ontology whereas linguists give priority to comparing  $u$ -properties in terms of an underlying cognitive organization and derive conclusions from that.

There are two domains of research in which there turns out to be a trial of strength between the logical and the linguistic view boiling down to a contest between ontology and cognitive organization. The first one is the semantics of

eventualities, the second is the semantics of tense.

In my recollection Donald Davidson never mentioned Zeno Vendler (and conversely), but it is clear that the two have much to do with each other. In short, Davidson contributed 'there exists an  $e$ ', Vendler provided a quadripartition of  $e$ 's and later on Link's mereology provided physics as the basis for the logical analysis of aspectuality. And indeed, with these three elements one can build all sorts of event-systems and play with them.

There is another tradition in the same area, however, which departs from the language side and which is dependent on comparing all sorts of languages with respect to the way they encode temporal information overtly or covertly in morphemes or in phrases. This tradition claims that a tripartition State, Process and Event does a better job in explaining how language works, however without being forced to see the three classes as ontological entities that exist "out there". This is because (naive) physics is not



taken as the basis for semantics but rather the cognitive organization of information that we use if we talk about what we experience as the world, an organization in which natural numbers play a crucial role in accounting for the sense of discreteness. To cut things short: one can do event semantics with (natural) numbers or indices or what everone calls the abstract organizational entities that help to order our cognition, without any fixed ontological commitment in the Davidson-Vendler line of thought. Practice has it that logicians are more easily seduced into ontological structure than in structure at the *u*-side of the interpretation function. And so are those linguists impressed by the powerful tools of logicians.

The preceding example may be somewhat compact for those who do not themselves work in the field of aspectuality, but rather than expanding it, I would like to make the same sort of point with respect to the analysis of tense, as discussed in my recent book<sup>1</sup>. I have written it as a second attempt to draw attention to a 19<sup>th</sup> century Dutch linguist L. A. te Winkel who proposed a magnificently simple and brilliant tense system consisting of three binary oppositions: (a) Present - Past, (b) Synchronous - Later; (c) Synchronous and Earlier (I have slightly modified terms here in order to keep things simple). The three oppositions lead to a cube and therefore to symmetry between any four of the eight Germanic tenses.

The first attempt was in 1985<sup>2</sup>. All those years people told me that it was really a nice system, but they stuck to the standard set in 1947 by Hans Reichenbach whose two tripartitions (a) Past - Present - Future; and (b) Earlier - Synchronous - Later create a matrix<sup>3</sup>. Every tense semanticist knows about the

inadequacies of Reichenbach's system and tries to remedy its shortcomings by putting on all sorts of auxiliary bandages but fails to see the fundamental issue: the dominance of the underlying ontology. Hence the book, in order to explain in detail, in all sorts of areas in which tense plays an important role (adverbials, complex sentences, ambiguity, etc.), how a binary approach offers a viable alternative to the ternary approach

Why should this be so? Well, a plausible answer is that (again) physics has been the dominant model for the v-part of  $||u|| = v$ . The tripartition Past - Present - Future in which future is made dependent on the Now of the experiencer has simply been adopted as being buttressed by science. It is not for nothing that Reichenbach in his book *Space and Time* occupied himself with the question of whether relativity theory should have consequences for his analysis of temporal phenomena as expressed in natural language. The answer is given in his analysis on tense: old-fashioned Newtonian physics suffices to serve as a model for ontological exercises.

In Te Winkel's binary approach one of the consequences is that future is detached from the Now of the speaker. This has interesting (philosophical) consequences: one of them is that the future is always part of the (now-)present or of the (then-)present: it is to be considered that part of the present in which the eventuality has not yet been actualized in real time. Hence the modal flavor of the future. The notion of present also becomes really interesting: it is what speaker and hearer consider to hold as the present for the purpose of their interaction. Note that in sentences like *Today/This week/This month, this ...) she's working on her book* the present is today, this week, this

month, all signaled by the use of the present tense form in is.

So, the question is: why do logicians take the easy road of staying close to physics as the model for their insight into the v-range of the interpretation function? Why not be (more) interested in the wealth of insights that are possible if you simply look at the language and observe that in Dutch and English there are four present forms and four past forms, that there are four posterior forms (with *zullen* and *shall/will*) and that there are four perfect forms (with *hebben* and *have*)? Why not be interested in what happens if you apply the binary system to languages having less than eight or more than eight tenses? Why stick to the non-linguistic or not necessarily linguistic tripartition Past - Present - Future that treats the present as a floating point even though we know as language users that we take the present as something different, as demonstrated above?

These questions may be seen as a sort of reproach, but given my own close cooperation with logicians one can hardly accuse me of trying to disturb the happy marriage between the two disciplines that have stolen my heart. But being a linguist I cannot escape from asking serious attention for the u-side of  $||.||$ . And to humbly ask the logicians to not forget that linguists tend to be so impressed by logical tools that there is a danger that they nearly swallow everything offered from the logical side, even its biases.

<sup>1</sup> Henk Verkuyl *Binary Tense*. Stanford: CSLI Publications Volume 187, 2008.

<sup>2</sup> H.J. Verkuyl & J. A. Leloux-Schuringa (1985), Once upon a tense. *Linguistics and Philosophy* 8, 237-261.

<sup>3</sup> Hans Reichenbach, *Elements of Symbolic Logic*. New York 1966 [1947]

*The Music Cognition Group competed for the prestigious popular science award 'De Academische Jaarprijs'. Group leader Henkjan Honing reports.*

# Why bother to battle?

The *Academische Jaarprijs* (promoted under the title 'The Battle of the Universities') is an initiative of the Netherlands Organisation for Scientific Research (NWO), the Royal Netherlands Academy of Arts and Sciences (KNAW) and the newspaper *NRC Handelsblad*. The competition is intended to highlight the social importance of scholarly research for a broad public. In this year's edition the music cognition team from the ILLC competed with a proposal that was entitled 'No music without a listener' (*Zonder luisteraar geen muziek*). The team-members were Olivia Ladinig (PhD student at the ILLC), Vivienne Aerts (Psychology student) and Shane Burmania (Musicology student), Leigh Smith (Postdoctoral researcher at the ILLC), and Henkjan Honing (team leader, music cognition researcher at the ILLC).

## The plan

Our project aimed to show that all listeners play an active role when listening to music, that most people are more musical than they might think, and to make a general audience aware that cognitive science can actually say something about our listening experience. On the basis of existing research in music cognition (including that of our own team published in the last few years), we proposed to develop an exploratory online listening environment: an advanced website (with the title *jeweetnietwatjeboort.nl*, 'You won't believe your ears!'), that does not test how well you can make or read music, but shows you what your (hidden) skills are as a listener. The visitor could explore its capabilities around theme-questions like 'do I have a sense of timing?' or 'do I

have a sense of rhythm?', as well as getting feedback on how cognitive science addressed and sometimes found answers to some of these questions. Next to a website we designed a 50-minute TV show around the same theme, and with the same title.

The whole trajectory from registration to the finals took about one year. This year eleven teams made it into the nomination stage. All of them had to submit an elaborate communication plan that, together with the presentation to the jury -consisting of chair Rick van der Ploeg, Piet Borst, Adriana Esmeijer, Leo Halvers, Rob van Hattum and Marja van der Putten-, would form the basis on which the jury would decide for the winner.

We were nominated in November 2007 by the ILLC, the faculty of Humanities, and, consequently, by the rector magnificus of the UvA as 'fulfilling the criteria', that is, having a preliminary plan that showed we might be able to communicate novel (not older than three years) and innovative research to a larger audience. So the nomination in itself was already quite a reward.

After half a year of meetings, brainstorming, lobbying, talking to TV producers, web-designers and the press, we had formed a solid consortium in support of our ideas. In the end of April 2008 we could submit nine beautifully printed copies of our communication plan, nine interactive DVDs (showing mock-ups of our plans), and a letter of intent from Pvh Tv/Film productions and the NPS. That was actually my most optimistic

moment. Unfortunately, it turned out not to be as simple as that.

## The Finals

The finals itself were sheer fun. In the Muppetshow-like surroundings of the Leidse Schouwburg the eleven nominees presented their ideas in 15-minute presentations, followed by ten minutes of serious, and often tough questioning by the jury, most notably by Piet Borst.



*Addressing the question to the audience: Who does not care about music?*

Our presentation had a false start: the Apple-laptop couldn't get its signal through to the beamer. Jokes about the 'special behavior' of Apple were quickly made by the chair of the day. However, in the time that the technical staff needed to figure out what was wrong (it turned out to be a loose cable), team member Shane Burmania thought of doing the 'silent disco' opening in our second try behind the screen, instead of in front of it (much like an Apple iPod commercial), Vivienne Aerts insisted we should adapt the

coloring of the first slide, and Olivia Ladinig thought of an alternative choreography. All this was decided in less than a minute. At that moment my energy levels lifted by at least 50%. This was a team!



*Second try of our presentation, paraphrasing an iPod commercial.*

We didn't win. Nevertheless, it was certainly worth all the extra (not typically academic) effort. We certainly won lots of attention for the field of music cognition, my main motivation for participating.

If you are thinking of participating in the next edition of the Academische Jaarprijs, and feel you have enough extra resources to take some risks: go for it! Participating is fun, it helps you focus your research, grow a real team, and at worse, you might attract a few new students.

*Henkjan Honing*

For more information see [www.jeweetnietwatjehoort.nl](http://www.jeweetnietwatjehoort.nl)

## GAMES IN LOGIC REACHING OUT TO CLASSICAL GAME THEORY:

# GLoRiClass

GLoRiClass is the largest externally funded research project of the ILLC, both in terms of funded positions (eight) and in terms of permanent staff members associated to it. This year the project marked half way through its four years. We decided to ask some of the many people involved in the project to tell us a bit about the project and how they fit into it.

### An Overview

#### Benedikt Löwe

The project coordinator (*“Scientist-in-Charge”* in the jargon of the EU). In addition to the three ILLC research

programmes (Logic and Language, Language and Computation, and Logic and Computation), there are two “spearheads”, themes that horizontally permeate the research programmes (if you imagine the programmes as columns upon which the ILLC is standing). One of these spearheads is Logic and Games.

ILLC researchers have been very active in *Logic and Games*, and some have been key contributors to the field. There are parts of the research community of *Logic and Games* that are focussing on issues that could not easily be subsumed under either the concept “logic” or “games” (of course, ILLC people are well-known for understanding “logic” in a very broad sense). The fact that modern logic is about interaction, information exchange and the social character of information allows *Logic and Games* to be a cohesive research area.

*Logic and Games* had been gaining speed and weight over the last decade with the conference series TARK (“Theoretical Aspects of Rationality and Knowledge”) and LOFT (“Logic and the Foundations of Game and Decision Theory”). ILLC researchers were very much involved in spreading the word of interactive logic by a number of international events, such as *FotFS V: Infinite Games* in Bonn (November 2004) and the 7<sup>th</sup> Augustus De Morgan workshop *Interactive Logic* in London (November 2005). Widely recognized as one of the centres for this field, the ILLC was awarded a Marie Curie Early Stage Research Training Mono-Host Fellowship (EST) by the European Commission (from 2006 to 2010). These EST are graduate schools for a number of PhD students from various backgrounds focusing on one particular interdisciplinary research area, and our EST named “Games in Logic Reaching Out to Classical Game Theory” (GLoRiClass) funds eight PhD students, the GLoRiClass Fellows. The aim of GLoRiClass was and is to reach out to those areas in mathematics, computer science, game and decision theory that are connected to the efforts of the *Logic and Games* community, but not yet fully incorporated. This includes the mathematical techniques to deal with infinite

games (connected to the applications of infinite games in computer science), the use of techniques from decision theory and social choice theory in computer science (now an integral part of ILLC research under the name of “computational social choice”), and the use of game techniques in computational linguistics and philosophy of language. Our first PhD students were hired on 1 February 2006, and by now, the eight GLoRiClass fellows form a lively group with various interactions between the young researchers.

*The GLoRiClass Fellows* Cédric Dégrement (France), Amélie Gheerbrant (France), Daisuke Ikegami (Japan), Marc Staudacher (Switzerland), Jakub Szymanik (Poland), Joel D. Uckelman (U.S.A.), Andreas Witzel (Germany), Jonathan Zvesper (United Kingdom)

GLoRiClass is not just a graduate school for these eight fellows, but provides an opportunity with the weekly GLoRiClass Seminar for all ILLC researchers to connect to game-related research in their respective fields (also check out our list of GLoRiClass-related staff members and associated fellows on the website). In addition to that, GLoRiClass has been involved with other activities that aim at furthering research in *Logic and Games* and broadening its scope by including more techniques from related fields. Since the inaugural GLoRiClass event on 14 March 2006, GLoRiClass has been involved with various conferences and workshops, for instance the KNAW Academy Colloquium *New perspectives on Games and Interaction* (February 2007) in collaboration with the NIAS Nucleus *Games, Action and Social*

*Software* and the conference *FotFS VI: Reasoning about Probabilities and Probabilistic Reasoning* (May 2007). In April 2008, GLoRiClass sponsored a symposium at the AISB (“Artificial Intelligence and Simulation of Behaviour”) convention in Aberdeen that brought together logicians who develop theories of interactive behaviour and researchers from the practical side who implement artificial agents reasoning about knowledge and belief states of other agents. At this symposium, two of our fellows, Andreas Witzel and Jonathan Zvesper gave a programmatic presentation demanding that higher-order knowledge should play a more important role in simulation of behaviour in practice. We met with game designers and programmers from Sony, and hope to continue our fruitful discussions with this community in the future. Using GLoRiClass as a platform, the *Logic and Games* community also has a new outlet for their research: the new book series *Texts in Logic and Games* (TLG), published by Amsterdam University Press and officially launched at the GLoRiClass Halftime Event in February 2008. The first three books have appeared (incidentally, the first one is the proceedings volume of the 7<sup>th</sup> Augustus De Morgan workshop mentioned above), and two additional volumes will appear soon.

As an EU-funded project, GLoRiClass has two more years, and we would like to invite all ILLC researchers and students to get involved with this exciting research area. Connections of *Logic and Games* with many other research fields (sociology, experimental game theory, computer games, artificial intelligence, board games, linguistics, and many others) exist

and should be developed further. We have just begun to understand the scope of our field, and we would to explore it further with as many of you as possible.

### The Inside View

Four of the eight GLoRiClass PhD students describe their part of the project:

#### Marc Staudacher



Why do words mean what they mean? — This is the central research question I work on in my PhD

project. I argue that it’s because there are conventional regularities about what speakers mean and about what hearers understand when they engage in linguistic communication. Though, language is a complicated matter. That’s why I like an interdisciplinary approach to research. The ILLC, and in particular the GLoRiClass project of which I am part, provides just that. Before I came to the ILLC last year, I’ve studied Philosophy, Linguistics, and Informatics in Zurich (my hometown which is in Switzerland) and Bielefeld (Germany). There I started to appreciate collaborative research — which I consider to be one of ILLC’s strengths, too. In my first year here, I learned a lot from my friends and colleagues. Now it’s time to give them something back. So stay tuned!

**Joel Uckelman**

I'm originally from Iowa, which is very nearly in the center of the United States; I have a BA

in History and Philosophy from Iowa State University, and an MA in philosophy (but really logic) from University of Wisconsin-Madison. What I'm working on now is social choice, and more specifically, preference representation using a particular family of logical languages. The idea is to characterize these languages as to how expressive they are, how space-efficient representations in these language are, and how difficult it is to answer queries about preferences in these languages. Some possible applications are as bidding languages for combinatorial auctions and as voting languages for multiwinner voting, though the motivation in these two areas is exactly opposite—in the former, the idea is to reduce the expressivity of the languages to just what's needed in order to hold down the complexity of computing winners in auctions, while in the latter the idea is to offer the voters more expressivity than methods commonly in use do now. Whether I'd describe what I'm doing as logic or computer science or something else depends on who's asking—it straddles all three. Collaboration with others in the GLoRiClass project has been surprisingly fruitful for me, despite that my work doesn't have a lot of obvious points of contact with the work of others in the project.

**Andreas Witzel**

I'm Andi from the Black Forest (yes, as in Black Forest cake!), trying to combine logic, game

theory and computer science as part of the famous GLoRiClass project. My supervisor is Professor Apt, so I spend two days a week at his main base, the CWI.

In the beginning it was a bit difficult to find my way in this project which didn't really seem to be a project in that sense — no clear goals, no common research plan, not much coherence or interaction between the participants. Meanwhile, though, some collaborations within the project have indeed developed, and I've come to appreciate the freedom that comes with such a loosely defined project.

Currently I'm mostly interested in how to define what communicating computational agents (or processes) could be said to know, how to actually make that knowledge available to them, and what they can do with it in a game-theoretic setting. More general, strategic interaction between rational agents (including humans in some ways) is an exciting topic, and thinking about knowledge is intriguing, even though I'm a less than mediocre philosopher.

**Jonathan Zvesper**

Having arrived in Amsterdam to do the "fast track" MoL after a pedagogically disappointing year of

logic in Paris, I was thrilled to have the opportunity to stay on at the ILLC to do a PhD. This was in the context of the mysteriously case-sensitive "GLoRiClass" project. The only constraint seemed to be that there had to be some connection with games, in a fairly broad sense. Since I'd been interested in game theory before arriving in Amsterdam this was a happy setup for me.

Since then two years have passed, the project has had its half-way point and my doctoral project is well past the half-way point, at least in theory. I've collaborated with a number of the other GLoRiClass students, but the project is extremely diverse — a set theorist, a computational linguist (I think!), a model theorist, the list goes on. That can be seen as a weakness: our regular GLoRiClass seminars do not illicit the interest from all participants that they might in a more cohesive project. But it's also a great strength: some surprising interactions have sprung up, and the project is certainly very ILLC.

*Photographer: Peter van Emde Boas*



INTERVIEW WITH EYAL HURVITZ AND MERLIJN SEVENSTER

# Alumni



Ten years ago, **Eyal Hurvitz** was one of the first to graduate from the Master of Logic programme at the ILLC. The editors tracked him down for an email interview. Looking back at his time at the ILLC from a different viewpoint is **Merlijn Sevenster**, who defended his PhD in 2006.

## Eyal Hurvitz

*Could you tell us a bit about how you ended up in Amsterdam, on what used to be quite a small MoL programme?*

I had just started an MA program at my local university when I heard about the MoL program. While I was really satisfied with my bachelor studies which included a wide range of extra courses that I followed, I felt something was missing after finishing my first semester as an MA student: the department was very small both in terms of staff and graduate students, and I felt the need to be in a more inspiring academic environment, considering my rather unique combination of interests: linguistics and cognitive science on the one hand and mathematics, logic and computer science (especially AI) on the other. I happened to notice an advertisement of a fellowship that was offered in Amsterdam under the title of the Spinoza project.

I easily matched the profile they were looking for; I decided to apply, and when I got a positive answer, I started packing...

*What was your motivation for coming here?*

Studying abroad seemed to me like a very exciting experience. Add to this the good memories I had from a couple of previous visits to Amsterdam as a teenager, my clear preference to Europe, and the recommendations I got from the local academic staff (including some researchers who personally knew some of the active figures in the my field of interest at the UVA), the decision was not hard to make.

*Were you surprised by anything you found here?*

From the current perspective it is everything but surprising, but I had expected the Master of Logic program to be more consolidated than I actually found it to be. I remember that in some classes I was the only non-Dutch student, and in some cases the professor wasn't even aware that his class was included in the program. I shyly raised my hand and asked if it was possible to switch to English. Everybody did it willingly, but now I think it could have been nice to pick up some Dutch...

I was also surprised from the relations between students and teachers. On the one hand, there was something formal about it, but on the other hand, I was a bit surprised by the mingling between teachers and students at the bar, and from the mere fact that they go for a drink together... What was a bit disappointing was the small number of people who were interested in natural language-related issues. Most focused on other aspects of logic and computer science.

*How many other masters students were there back then? What sort of courses did you take?*

I remember we were around 5. I attended courses in linguistics (dynamic semantics, Montague grammar), logic (modal logic, non-monotonic reasoning) and another interesting course on the semantics of programming languages. I also audited a few other classes.

*What did you do once you had finished the programme?*

At first I thought I wanted to start a PhD at the Technion in

Haifa, Israel. I stayed and worked there for a semester, but I felt I didn't want to continue with theory and wanted to try a more practical approach in the industry. I worked for 5 years at a startup company in Israel that developed a technology for automatic extraction of information from unstructured documents, based on ideas from natural language processing. My work included research but was largely implementational. It was my first attempt in the industry, and a rather successful one. During that period I arrived in Helsinki where the yearly European Summer School of Logic, Language and Computation (ESSLLI) took place and I met many of my fellow students and teachers from Amsterdam.

*Could you tell us what you do for a living nowadays?*

These days I'm a senior developer at another software company but this time I'm no longer working in a field directly related to my academic past. I have

quite a lot of free time because I insisted on not working full-time. This allows me to follow my other interests, and I'm considering going back to research at some point.

*How did you end up in that profession after finishing the MoL?*

At first I was happy with my field - natural language processing - and was just looking for a balance between theory and implementation, which I happened to find it in the industry. However, 5 years later I needed a change, and I became interested in environmental studies. I ended up in a small laboratory at the Tel Aviv University, as part of a small research team under the title "Environment and Justice". It was happy about this at first, but later I ended up at some other place. In the Israeli high-tech it is very trendy to change jobs every once in a while, so the atmosphere really encourages it. By a coincident, this academic break in the midst of my career provided me with another encounter with the Dutch academy, as my research supervisor was a

Dutch citizen who lived for several years in Israel and by now is back to the Netherlands.

*Did you keep in contact with any professors or colleagues from the ILLC?*

At first I did, but unfortunately the contact got loose as time went on and as I evolved professionally. As I think about it, I regret not having done enough to keep in touch with people from that time.

*Looking back, what are the most import insights, skills or lessons you learned from your time in Amsterdam, either as a student or in general?*

I think I managed to overcome some difficulties that I used to have. Back then, the thesis protection session was quite a new experience for me. I remember having to congest so much information in such a short time in front of an audience without messing up everything, and of course without getting cold feet and starting to mumble. Of course, I also had to stay focused to be able to answer the questions at the end. I was happy with the way I overcame my fears, and I think it really helped me to gain confidence later on.

I have very good memories from the people I got to know, like fellow students, teachers and staff at the ILLC. I enjoyed the liberal and tolerant spirit of Amsterdam, the Concertgebouw, and even learned to appreciate every little bit of sunshine...

During my stay in Amsterdam, I lived among exchange student, mostly from all around Europe, and it was very interesting to experience the atmosphere which was quite different from what I had known from Israel. I truly miss that period.





## Merlijn Sevenster

*How did you end up at the ILLC and how long did you stay there?*

I did a master's in AI and by the time I was finished I liked to strengthen my background in formal methods, such as logic. To this end I put together a one year equivalent of courses in philosophy with an emphasis on logic. Then, halfway, Peter van Emde Boas contacted me asking if I'd want to do a PhD. From september 2002 to october 2008.

*Who were your supervisors and what was your thesis supposed to be about...*

It was supposed to be on games of imperfect information and computational models. So: Are games with imperfect information computationally harder than games with perfect information? Johan van Benthem and Peter van Emde Boas were my supervisors. Scientifically, I worked extensively with Tero Tulenheimo.

*... and what was your thesis actually about?*

I guess I've been a good boy. My thesis is actually on the complexity of games of imperfect information even though I took an approach (based on logics of imperfect information) that wasn't necessarily in the project description.

Round the time of my defense, I was invited to write a press release on my research. In an effort to make it all comprehensible for a

broad audience I explained some key notions in terms of Sudoku. The press release didn't pass unnoticed: quite a number of websites published it. However, they cut the parts where I explained my own results and added a title suggesting that I did extensive research on Sudoku. So if you google my name, you may easily get the impression that I'm the world's leading expert on the complexity of Sudoku, which, for the record, is not the case.

I even found a forum where a number of Sudoku fanatics discuss the press release (or actually the weblogs' renderings). One fanatic took the effort to download my thesis. Apparently he had a look at it: he assured his fellow fanatics that the thesis was more rigorous than the press release and that the thesis wasn't actually about Sudoku at all.

*Were you engaged in any non-scientific ILLC-related activities, perhaps involving a certain magazine?*

I did two issues of the ILLC magazine with Reut Tsarfaty, Marian Counihan and Ingrid van Loon. When I got the latest issue of the magazine I was happy to find that quite a number of items were in that we've "invented".

The template for newcomers to introduce themselves was actually ours. The aim was to make it easier for people to say something personal. This somewhat contradicts the idea of filling in a template, but my impression was that is worked. I'm curious if it's in this issue...

With Hartmut Fitz, I've organized the Logic Tea for a while.

*What is your new job?*

I'm working as a researcher with Philips Research in Eindhoven. We are supposed to bridge the gap between new technologies and scientific trends on the one hand and Philips product divisions on the other hand. Currently I'm in a project investigating the opportunities to use ontologies for storage and retrieval of medical data.

*Does that mean you are in fact doing logic?*

Ontologies and the ontology languages proposed by the W3C, so-called description logics, are very close to modal logics. So I try to get an overview of what's going on in that field. But I'm afraid that they will be of little use to my current project. For the rest I'm learning a lot about algorithmics in the sense of programming fast algorithms, not in the sense of NP-completeness etc.- How did you end up at Philips Research? After my PhD I wasn't so sure whether I wanted to pursue an academic carrier, so I looked out for something a bit closer to industry. "To stretch my effort zone" as one of my colleagues from marketing likes to put it. Philips Research is an interesting mix in that respect: we're supposed to go to conferences, publish in scientific journals, supervise PhD students, but also is it encouraged to work on your management and business skills.

*How is this mix of academia and industry working out for you?*

Well, as far as industry is concerned, I can only tell you about Philips Research of course. I do like learning about all the different aspects that come with developing promising concepts: learning new technologies, brewing new concepts, getting a sense for who might be interested in this, what the best business model would be, etc. The idea that there is an opportunity that some product division will pick your concept up if you convince him is exciting.

*Are there things that you miss from your time in academia at the ILLC?*

Every now and then I miss working hard on crisp, well-defined problems — the feeling that you are not capable to crack a problem, and then solving it. As for the ILLC I do miss the gezellige atmosphere and especially our office, which was more like a living room. I was extraordinary lucky to share this office with Aline Honingh, Sieuwert van Otterloo and Yoav Seginer for such a long time.



INSPIRING RESEARCH: LEIGH SMITH

# The Circularity Of Tempo Curves



I had played nylon string guitar from an early age, but by 15 had felt that the classical only repertoire that was taught at the time was unrewarding and had stopped playing. I had also just discovered another interest which nudged out music: early (8 bit) microcomputers. When I started a B.App.Sc. in computer science, I read a description of the new MIDI (Musical Instrument Digital Interface) standard (Swearingen 1985) and decided to explore music synthesis. While MIDI, at the time of release, was justifiably criticised (Moore 1988, Muir and McMillen 1986) as being

keyboard centric, it was a major leap over early methods of interfacing synthesizers to computers (which mostly used a 1 volt per octave standard for control of pitch and even that differed between manufacturers) (Strange 1983). I bought a synth, and that led to joining a rock band!

I later read Gordon Mumma's article (1975) on live electronic music which broadened my musical horizons and helped me discover the academic computer music field. My Post Graduate Diploma (equivalent to a modern European

MSc.) thesis considered issues in representations of music and event scheduling for real-time interactive musical performance systems. This led to the opportunity to attend the International Computer Music conference in Montreal in 1991.

I had read Desain and Honing's (1988) representation of musical microworlds using the Logo language. Their presentation "Tempo Curves Considered Harmful" (Desain and Honing 1991) referring to Dijkstra's paper, was a very attractive title for a talk! Their presentation, in the form of a fictional story of a discussion between a mathematician, psychologist and a musician, was one of the most engaging presentations I've seen. In it, they made a very clear case against considering expressive timing (rubato) as separable from the rhythmic structure itself. This idea eventually led to my PhD thesis using continuous wavelet transforms to decompose a performed rhythm into its structure (in the form of periodicities), together with expressive modulations.

With my joining the ILLC and working with Henkjan, that initial inspiring presentation has led full circle, to continue to work on issues of musical representation for interactive music applications.

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- P. Desain and H. Honing. "LOCO: A composition microworld in logo" *Computer Music Journal*, 12(3):30-42, 1988.
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Each year the new PhD students at the ILLC receive a questionnaire from the ILLC Magazine. Here we present a list of all new PhD students since the previous edition, along with the responses we got.

**Name:** Harald Bastiaanse  
**Started:** April 2008  
**Supervisor:** Veltman  
**Group:** Logic and Language



**Name:** Gideon Borensztajn, 24  
**From:** Amsterdam  
**Started:** May 2007  
**What is your background?**

My first attempt at an academic career was in physics, but I left that topic after I graduated in 1992. Then I travelled the world, and worked mostly in computers, only to discover that I was hungry for another academic adventure. I studied cognitive science from 2004-6.

**What is your research topic?**

Computational linguistics

**Who are your supervisors?**

Rens Bod and Jelle Zuidema

**Where do you like to work?**

Since I moved to a nice apartment in the Pijp, I like to work at home; or if you mean where I would like to work in the future, I would say in Amsterdam or in Tel Aviv, in an academic environment, or in an elementary school.

**What is your favourite / least favourite aspect of living in Amsterdam?**

My favourite aspects of living in Amsterdam are many:

- 1) the absence of much traffic in the inner city, and the relatively fresh air
- 2) the opportunity to go everywhere by bike or rollerskate, and to reach the countryside within a few minutes
- 3) the football games in the park and
- 4) the beauty of the city's architecture.

Less favourite are the Dutch people, whom I find sometimes quite boring, and that includes myself, since I grew up here as well.

**What is your favourite Dutch word?**

My favourite Dutch word is a funny question to ask a native speaker, since I know so many... perhaps 'hottentottentententententoonstelling'.

**What is your favourite game?**

Football, of course.

**What is your favourite formula?**

The one that you use to make ice cream.

**Name:** Khairun Nisa Fachry  
**Started:** September 2007  
**Supervisor:** Kamps  
**Group:** Language and Computation



**Name:** Dimitris Gakis, 28  
**From:** Lamia, a city in the centre of Greece.  
**Started:** September 2007  
**What is your background?**

My BSc was on

Computer Science (University of Crete, Greece) and my MSc on Computational Linguistics/Language Technology (University of Athens, Greece). My Msc thesis was about modern analytic philosophy and its relation to language technologies, having machine translation as my case study.

**What is your research topic?**

It is about the polypapadigmatic character of philosophy and how philosophical paradigms are developed and established. My case study will be analytic philosophy in the 20<sup>th</sup> century and specifically the wider context (social, cultural, scientific) in which Wittgenstein's ideas emerged and were established.

**Who are your supervisors?**

Martin Stokhof.

**Where do you like to work?**

When I am really in the mood for working, everywhere!

**Where do you like to not work?**

See above.

**What is your favourite / least favourite aspect of living in Amsterdam?**

I don't have a specific one, but I really like the whole atmosphere and mood of the city. What I don't like is the fact that I don't have enough free time to enjoy it.

**What is your favourite Dutch word?**

I only know my least favourite: 'uitverkocht'.

**What is your favourite game?**

Football I guess...

**What is your favourite formula?**

I don't think I have any...



**Name:** Yurii Khomskii, 27  
**From:** Russia, but living in the Netherlands since 1992.  
**Started:** September 2007  
**What is your background?**

Mathematics

**What is your research topic?**

Set theory of the reals, descriptive set theory. Basically, it's about various foundational issues of the real number continuum.

**Who are your supervisors?**

Dr Benedikt Loewe

**Where do you like to work?**

In the bus... in the train... in the toilet... whatever.

**What is your favourite game?**

"Clever Animal" (don't ask). Although from a professional point of view I should probably also mention the Banach-Mazur game, the Solovay game, the Wadge game and so on.

**What is your favourite formula?**

"A or not A"

**Name:** Lena Kurzen, 25

**From:** Some little town in Germany

**Started:** September 2007

**What is your background?**

BSc in Cognitive Science, MSc in Logic

What is your research topic?

Logics for interactive situations

Who are your supervisors?

Johan, Peter

**Where do you like to work?**

Flevopark, Oosterpark and sometimes also in my office.

**Where do you like to not work?**

Almost everywhere.

**What is your favourite Dutch word?**

'Uitbuiken'

**What is your favourite game?**

3 ball gladiators



**Name:** Raul Andres Leal, 26  
**From:** Bogota, Colombia  
**Started:** September 2007  
**What is your background?**

I am pure mathematician with several philosophical confusions.  
**What is your research topic?**  
 I study Kripke frames and modal logic at a more abstract level, namely coalgebra.

**Who are your supervisors?**  
 Yde Venema

**Where do you like to work?**  
 On my bike, while attending a talk, and eventually at my office or Kriterion.

**Where do you like to not work?**  
 At home, anywhere after I have left my office.

**What is your favourite / least favourite aspect of living in Amsterdam?**  
 I love biking around. It would be nice if there would be less rain and wind.

**What is your favourite Dutch word?**  
 'Bertje'

**What is your favourite game?**  
 GO

**What is your favourite formula?**  
 Weiestrass formula for a perfect mathematician. Perfect mathematician = half poet + half mathematician. If you add more poetry it gets nicer ;) not the other way around.

**Is there anything you would like to add?**  
 Nope

**Name:** Edgar Jose Andrade-Lotero, 29  
**From:** Bogotá, Colombia  
**Started:** September 2007

**What is your background?** Matematician (2002) and Master of Logic (2006)

**What is your research topic?**  
 My research proposal title is "Philosophical presuppositions in formal semantics for natural language"

**Who are your supervisors?**  
 Martin Stokhof and Michiel van Lambalgen

**Where do you like to work?**  
 In the office, but occasionally at home

**Where do you like to not work?**  
 The bathroom, the pool, the kitchen...?

**What is your favourite / least favourite aspect of living in Amsterdam?**  
 Favourite: The buildings, the canals, the bikes.  
 Least favourite: The weather, the food.

**What is your favourite Dutch word?**  
 'Gezellig!'

**What is your favourite game?**  
 Battlefield (PC simulator game)

**What is your favourite formula?**  
 $\$p\wedge q \rightarrow \neg p \vee q$



**Name:** Stefan Minica, 30  
**From:** I was born in Sighetu-Marmatiei, Romania.  
**Started:** September 2007  
**What is your background?**

Before coming to Amsterdam I studied philosophy in Romania, where I received a University Degree in philosophy from University of Cluj and a Master Degree in theoretical philosophy from University of Bucharest. I also studied for a while in Finland, where I was a visiting student of the Department of Philosophy, University of Helsinki.

**What is your research topic?**  
 Logic and games.

**Who are your supervisors?**  
 Johan van Benthem



**Name:** Hugo Penedones  
**From:** Porto, Portugal  
**When:** September 2007 - June 2008  
**What is your background?**

Informatics and Computing Engineering  
**What is your research topic?**  
 Artificial Intelligence (focus on learning)

**Who are your supervisors?**  
 Don't have a supervisor, Ulle Endriss is my academic mentor though.

**Where do you like to work?**  
 It depends on the task, but in general I like places with natural light.

**Where do you like to not work?**  
 In very noisy places.

**What is your favourite / least favourite aspect of living in Amsterdam?**  
 I love biking to University, I hate doing it against the wind!

**What is your favourite Dutch word?**  
 'Lekker' is nice.

**What is your favourite game?**  
 Life.

**What is your favourite formula?**  
 Euler's identity:  $e^{i\pi} + 1 = 0$

**Is there anything you would like to add?**  
 I would like to quote Mahatma Gandhi: "Live as if you were to die tomorrow. Learn as if you were to live forever."  
 (Hugo has left the ILLC since taking the questionnaire, eds.)

**Name:** Angelika Port  
**Started:** April 2008  
**Supervisor:** Groenendijk  
**Group:** Logic and Language



**Name:** Frederico Sangati  
**From:** Italy  
**Started:** September 2007  
**What is your background?**  
 Computer Science

**What is your research topic?**  
 Natural Language Processing

**Who are your supervisors?**  
 Rens Bod

**What is your favourite Dutch word?**  
 'Gezellige'

**Name:** Junte Zhang  
**Started:** October 2007  
**Supervisor:** Kamps  
**Group:** Language and Computation



Photographer: Yanjing Wang