This issue includes:

Guest column by Lev D. Beklemishev: New technologies, old habits

A special anniversary section with photographs

Beyond the realm of logic, language and computation: what students & staff do in their leisure time
Dear friends of the ILLC,

We are very pleased to present the latest issue of the ILLC Magazine, No. 15. This issue appears at the beginning of 2016, the year in which the institute celebrates its 25th Anniversary as the Institute for Logic, Language and Computation. As you can see, we have used this occasion as an excuse to have the ILLC Magazine re-styled; we hope you approve of the changes! No. 15 is also a somewhat thicker edition than usual, including among other things a special section with a selection of photographs from the ILLC past, and an article by Frank Veltman, one of our previous directors, giving his version of the inception of the ILLC.

Of course, we also have our usual features: this year Lev D. Beklemishev is the author of the Guest Column, on New Technologies, Old Habits. In Research Highlights, our four VIDI laureates, Raquel Fernández, Floris Roelofsen, Christian Schaffner and Ivan Titov, give us an idea of what their projects entail. Arianna Betti tells us how her academic background and interests have inspired her and helped inform her perspective as a philosopher and an interdisciplinary researcher. Phong Le was interviewed during his internship at Xerox Research Centre Europe, and Luca Spada elucidates the research he carried out during his EU MC fellowship at the ILLC.

Along with the interviews with many of the new PhDs and postdocs who started up in 2015, there are two longer interviews with ILLC Alumni: Amélie Gheerbrant (PhD in 2010), who is currently assistant professor in computer science at Université Paris Diderot; and MSc in Logic alumnus Nikhil Madhrala, who has been working as a junior consultant at Deloitte Consulting in India since graduating in 2014. The ILLC celebrated the 20th Anniversary of the Master of Logic in 2015; together with the photographs, Mol student Sirin Ozturk’s write-up on the Mol party will give you a general idea of the festive celebrations. In ‘Passing the Torch’, former Mol director Ulle Endriss and new Mol director Maria Aloni are interviewed.

The section ‘Beyond the realm of logic, language, and computation’ shows that our staff and students possess many unexpected talents. ‘Rethinking the UvA’ gives the views of some ILLC staff and students who were actively involved in the movement for more democracy within the university organization.

We hope that you will enjoy this issue of the ILLC Magazine at the start of the jubilee year. We would like to thank all the contributors for their contributions.

The Editors
Projects awarded
EU MC Global Fellowship for Sam van Goor
Sam van Goor received funding from the EU Marie Curie programme for a three-year postdoc fellowship for his project “Quality for Logic on Words (DFlow). Sam will carry out the first two years of his project at CUNY in New York, returning to ILLC for the final year.

‘AAA’ UvA-VU cooperation in Digital Humanities
As a part of the Amsterdam Academic Alliance (AAA), the UvA and VU were awarded 3 million euros for the new Data Science research programme.

Rens Bod was awarded an ERC Starting Grant for his project ‘QuModQu: Induction of Broad-Coverage Semantic Parsers’. Besides partly funding his own position, the project will also fund two postdoc positions and one PhD candidate.

Christian Schaffner has received funding for his VIDI project: ‘Graphs and Compositionality in Web-scale Natural Language Understanding’.

Floris Roelofsen was awarded a postdoc position for his project ‘QuModQu: Induction of Broad-Coverage Semantic Parsers’. Besides partly funding his own position, the project will also fund two postdoc positions and one PhD candidate.

Roelofsen’s own position, the project will also fund two postdoc positions and one PhD candidate.

Tamara Dobler received funding from the EU Marie Curie programme for a two-year postdoc fellowship for her project "Radical Contextualism and the Science of Meaning". The overall purpose of the project is to investigate the impact that radical contextualism has upon certain foundational issues in philosophy of language, formal semantics, and philosophy of science.

Google RPF project Ivan Titov extended.
Ivan Titov received a further year’s funding from Google for Ehsan Khaddamroozi, hammadi, PhD candidate on his project "Knowledge Graphs and Compositionality in Web-scale Natural Language Understanding".

New collaboration with Yandex
As a part of collaboration between Yandex (Russia) and ILLC, a new PhD student, Anton Frolov, joined ILLC. Anton will be jointly supervised by Khalil Sima’an and Ivan Titov.

Amazon Web Services grant on Ivan Titov
Amazon granted Ivan Titov access to their computational infrastructure to support his research on induction of semantic parsers from large-scale textual data.

Four VIDI grants at ILLC
The ILLC is extremely proud that NWO awarded VIDI grants to four ILLC researchers in 2015. This is one of the most prestigious research grants in the Netherlands, enabling researchers who have already spent five years doing postdoctoral research to develop their own innovative lines of research. The four researchers are:

- Raquel Fernández has received funding for her VIDI project: ‘Abstracting in Conversation. Besides partly funding her own position, the project will also fund one postdoc and a PhD candidate.
- Floris Roelofsen has received funding for his VIDI project: ‘Quantification and Modality in the Realm of Questions’. Current PhD student Ivano Ciardelli made important contributions to the QuoModQu research proposal and will play a prominent role in the project as a postdoc. Besides partly funding Roelofsen’s own position, the project will also fund two postdoc positions and two PhD candidates.
- Ivan Titov was awarded an ERC Starting Grant for his project ‘BROADSEM: Induction of Broad-Coverage Semantic Parsers’. Besides partly funding his own position, the project will also fund one postdoc position and a PhD candidate.
- Ivan Titov has received funding for his VIDI project: Learning Open-domain Semantic Parsers with Big Data and Little Supervision. Besides partly funding his own position, the project will also fund two postdoc positions and one PhD candidate.

SAP Project Ivan Titov
Deep Collaborative Clustering and Prediction is a joint project between ILLC (Ivan Titov, IvL (Max Welling)) and the well-known software company SAP. Titov and Welling have each received funding for a PhD position.

NWO Open Competition grant for Roosmarijn van den Hoog
Roosmarijn van den Hoog was awarded an NWO Open Competition grant to carry out his project "The Flow of Cognitive Goods". The grant, 735 kEuro, will fund two PhD positions and one postdoc position. Co-applicant is Jeroen van Doorneweijen from the Institute of Physics (IOP).

Prizes and awards
Sonja Smets awarded Lotze Medal 2015
Sonja Smets received the Lotze Medal 2015, awarded to scientists who have made significant contributions to experimental philosophy and pragmatismascetics. The prize was awarded during the Silesian Philo Club workshop, held in Poland in February 2015.

Roquel Alhama awarded best student poster at ICMP
Computational linguist Raquel Alhama won best student poster award at the International Conference on Computational Linguistics (ICCL15) with her work on: “How should we evaluate models of segmentation in artificial language learning?” (with Remko Scha and Jelle Zuidema).

Benedikt Löwe Secret Speaker at UNILOG 2015
Benedikt Löwe was the Secret Speaker at UNILOG 2015 in Istanbul (27 June 2015). The World Congress on Universal Logic has a tradition that the only plenary lecture is given by a secret speaker whose identity is revealed at the end of the talk. According to UNILOG, "previous secret speakers at UNILOG include Saul Kripke, Jaakko Hintikka, Gregor Mints and exclude Brigitte Bardot, Kurt Gödel, Arnold Schwarzenegger.”

Best Paper Award for Julian Schlöder
Julian Schlöder received the Best Paper and Oral Presentation Award for his paper "A Formal Semantics of the Final Rise", presented at the Student Session during ESLLI 2015 in Barcelona. The paper offers a formal model formulated in the SORST framework of how final rise intonation in English affects the discourse structure of a dialogue.

1st Luxembourg Art Prize
MoL student Albert Janzen was awarded the first Luxembourg Art Prize 2015, receiving a grant to practice a six-month sojourn to be held at La Galerie Hervé Lancelin in Luxembourg in 2016.

Rens Bod received Senior Visiting Fellowships at The Munich Center for Mathematical Philosophy (MCMP) in the Spring of 2016, to collaborate on the project "Cognitively Motivated Probabilistic Proof Systems".

Best Paper Award for Bill Noble
The paper “Centre Stage: How Social Network Position Shapes Linguistic Coordination”, by MoL student Bill Noble together with Rauluis Fernandez, received the Best Student Paper Award at the Cognitive Modelling and Computational Linguistics Workshop, part of NAACL 2015, Denver, Colorado.

Roosmarijn Goldbach wins UvA Thesis Prize 2015
MoL graduate Roosmarijn Goldbach was awarded the UvA Thesis Prize 2015 for the Best Master’s thesis defended at the University of Amsterdam over the past year. This distinction comes with a cash award of €3,000. Roosmarijn’s thesis, entitled “Modelling Democratic Deliberation”, brings together ideas from political philosophy, social choice theory, and modal logic.

Nina Gierasimczuk and Jakub Szymczak were awarded Senior Visiting Fellowships at The Munich Center for Mathematical Philosophy (MCMP) in the Spring of 2016, to collaborate on the project "Cognitively Motivated Probabilistic Proof Systems".

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Remko Scha 1945-2015

On 9 November 2015 Remko Scha passed away. Remko was a professor of computational linguistics at the ILLC, and from the early nineties until his retirement in 2015 he was one of the leading researchers at our institute. Remko made significant contributions to the semantics of plurals, to the formal theory of discourse, to Data-Oriented Parsing, and various other areas. The Dutch computational linguistics community has lost one of its founders and the international community an influential researcher.

Remko was born in Eindhoven in 1945 and graduated in physics in 1970 at the Technological University in the same city. His first job at Philips NaLab in 1976 brought him in contact with natural language processing in the context of the pioneering question-answering system PHLIQA. His PhD thesis on natural language questions and answers (University of Groningen, 1983) as well as his early paper on plurals in natural language are still necessary references for any work on the subject. They contain ideas and observations that are not yet properly absorbed in ongoing discussions. For example, few people can do the full range of readings observed for definite plurals. Many, in their attempts of dealing with cumulative readings introduced in Remko’s paper, break either the normal syntactic structure of the sentence or the principle of compositionality.

In 1988 Remko accepted a full professorship in computational linguistics at the University of Amsterdam. There he developed, together with his students and colleagues, Data-Oriented Parsing (DOP) as a major paradigm in natural language processing and machine translation. In the DOP framework, sentence processing does not operate with grammatical rules but with a corpus of previous language experiences. New sentences are processed by combining sub-analyses from previously analyzed sentences in the most probable way. This approach was especially successful in dealing with the longstanding problems of ambiguity and robustness of language processing. The model was used in various applications, leading to an impressively large number of funded projects in the Netherlands and abroad.

An enthusiastic and inspiring educator, Remko’s legacy remains at the ILLC as a flourishing Language and Computation group. Several of his former PhD students have become full professors themselves, including Rene Bod and Khalil Sima’an. Besides being a scholar, Remko was also a performing artist working on aleatoric music, algorithmic art, facial art and artificial body manipulation. In 1990, he founded the Institute of Artificial Art Amsterdam which became a breeding ground for algorithmic artists. Remko’s concerts with The Machines, an automated guitar band where the strings of the guitars are played by electronically controlled fan motors were unforgettable.

Remko was a most versatile researcher – he is vividly remembered and will be sorely missed.

Rene Bod
Radical interdisciplinarity
Arianna Betti

Often students of philosophy are after big questions. But that wasn’t the reason I enrolled in philosophy. I just couldn’t help searching for the most abstract way to look at things — often geometrically, like seeing and thinking in terms of places in a structure. No wonder the very first course in logic I took in Florence, Italy, was such a revelation for me. The teacher of that course was Ettore Casari. For me, there has been no other teacher, ever.

It is from him I heard for the first time of Stanisław Leśniewski, a Polish guy who, in the Twenties, in that by then still rather mysterious Eastern part of Europe, built a system of the foundations of mathematics that looked like an incredible mix of old and new — formalised Aquinas, or so. Leśniewski — better known as the master of his genius pupil, Alfred Tarski — was the galaxy’s most precise logician, bordering on madness. He published little, mostly in Polish, in a crazy notation, and his writings were at the time untranslated. This was an incredibly attractive mix, so I left for Cracow to learn to read Leśniewski’s works in Polish, and write my MA thesis. And so I became a historian of logic in a vertical market, the Polish tradition and its Austrian Roots.

Leśniewski was — and still is — one of my two heroes (if any there are in philosophy). The other one is the Bohemian polymath Bernard Bolzano. It is not by chance that all those who have come into contact with Bolzano’s Wissenschaftslehre, barring none, have their philosophical heart stolen forever. Perhaps this is the reason why the entire community of Bolzano scholars is suffused with such kindness, and joyful humanity. ([M]ankind is beset with innumerable evils simply because of ignorance and error, [...] we would be incomparably better off and happier on earth if only each of us could acquire exactly that information which would benefit us most under the circumstances.’ (Bolzano 1837, §1)

Now, when one’s tender philosophical brain gets fed Bolzano and Leśniewski at an early age, and none (seriously), none of the standard analytic philosophy lot, that brain must take a rather distinctive shape. No other kind of philosophy tended to prompt more vivid disagreement in me than ordinary language philosophy (‘we talk about facts whereas there must be facts’). Reflection on the grounds of that disagreement, and a parallel growing discomfort with certain practices in present-day analytic metaphysics and mainstream philosophy of language made me turn to metaphilosophical reflection on method. The 100-page reductio argument in Against Facts (2015) against so-called propositional facts is the result of disagreement and discomfort. (My colleague Jelle Zuidema started his inspiration piece on a similar theme.)

You can reflect on method on your own, the typical solo way of many philosophers, and that’s all very good. Nevertheless, inspiration for real reflection on method comes with interdisciplinary engagement – especially radical interdisciplinarity. Radical interdisciplinarity is, in my case, what is represented in the attempt to take a computational turn in the history of logic, or more generally, the history of philosophical ideas – a meeting of the oldest disciplines, philosophy and history, with the youngest, computer science. Philosophy is fastidious as much as computer science is problem-solving. I wish philosophy were a bit more like computer science. (Little wonder Against Facts ends on a methodological note inspired to consensus in metaphysics.)

Working with my fellow computational colleagues is one of the most inspiring experiences I have had so far. It made me realise I love philosophy at its best when it is in its most serviceable form: as a structuring of conceptual architecture for others, and an adventurous search for new (ways of posing) abstract questions in a sound way.

Whether radical interdisciplinarity is an eye-opener for all parties involved, I don’t know. It is for me, and a wonderful one.

References:


In May 2015, the ILLC was very happy to hear that no fewer than four of our staff members had been successful with their applications to the NWO VIDI grant scheme:

Raquel Fernandez, Floris Roelofsen, Christian Schaffner and Ivan Titov. This means a new influx of postdocs and PhD candidates to the ILLC. Together with the two ERC Starting grants awarded to Floris and Ivan in November 2015, we expect about 16 new people to start up in the next year or two.

In the following four pieces, the VIDI laureates give us an impression of what their individual projects are about and what their plans are. They also comment on how they experienced the selection process, and give some advice to those who are planning to apply for a VIDI grant in the future.

Christian Schaffner is an assistant professor at the ILLC who is affiliated with the CWI, the national research institute for mathematics and computer science. He is interested in quantum cryptography, cryptographic protocols, and information theory.

Cryptography in the quantum age

About the project
Quantum cryptography can provide security. Its best-known achievement is Quantum Key Distribution (QKD) which allows the generation of cryptographic keys based on the laws of quantum mechanics. However, modern cryptography studies a broad variety of other scenarios such as identification, secure collaboration, electronic voting, etc., that go far beyond the task of key distribution.

For all these tasks, most of the classical protocols used today become insecure once an adversary is in possession of a quantum computer. Even worse, not much is currently known about possible options to replace those protocols with secure variants. On the other hand, quantum effects can also be used by honest parties to obtain more secure protocols. My VIDI project studies this double-edged sword.

The project consists of two parts. First, together with a PhD student, I will investigate the field of position-based quantum cryptography. In standard cryptography, a password or digital key is used to identify a player. The goal of position-based cryptography is to use the geographical position as a cryptographic credential. The combination of relativistic constraints (assuring that information cannot travel faster than the speed of light) and quantum mechanical effects (such as the impossibility to perfectly copy a quantum state) enables entirely new cryptographic applications such as sending a message in such a way that it can only be read at a particular geographic position. Second, together with a postdoc, I will work on systematically developing a quantum-cryptographic toolbox that can be used to prove the security of quantum protocols for more demanding tasks than key distribution.

Taken as a whole, this project will make cryptography ready for the quantum age and improve the privacy of individuals, companies and public administration.

My research expertise in both the fields of classical cryptography and quantum information theory allow me to undertake such an exploration.

About the selection process
It is quite time-consuming to draw up such a big project proposal, so start early enough. On the positive side, it forced me to think about and formulate clearly in which directions I want my research to develop. It is an additional difficulty that in basic research, it is usually hard to predict what the exact results will be.

I received positive reviewer feedback about the proposal, but I knew that that is no guarantee for success, as an earlier version of the VIDI proposal was also selected for the interview round in the previous year, but eventually not funded. It was a good idea to call NWO a while after receiving the rejection letter to get more feedback about the interview phase. Somebody was taking notes and could inform me in more detail how my proposal scored in the different categories (and therefore the points which could be improved).

It is important to keep in mind that a non-negligible fraction of the final grade is determined by the “valorisation” criterion which should be addressed precisely according to the NWO guidelines. It could very well be that the improvements on this point allowed me to be awarded the project this time.

The “grilling sessions” for the interview preparation can be very nerve-wracking, but fortunately, I was pretty well-prepared from my previous interview experiences. This time, the interview went rather smoothly, with mainly content-related questions asked by the committee. The moment of the positive notification was a great experience of joy and relief, and celebrating together with three more ILLC VIDI laureates was even more fun!
Scaling semantic parsing to unrestricted domains

About the project

In recent years, in the natural language processing (NLP) community, there has been a renewed interest in semantic analysis. We are starting to realise that, without some form of abstraction, without some form of inference, we cannot make significant progress in any serious application we are interested in: be it machine translation, question answering or text summarisation. Consequently, we are getting obsessed with semantic parsing – developing methods for producing meaning representations of texts. Significant efforts are being invested in annotating data, and in designing new parsing models and algorithms.

Despite major efforts, the open-domain semantic parsing problem remains unresolved and, moreover, there is no agreement how this problem should be approached. The standard supervised learning scenario (inducing a parser relying on text collections annotated by experts), will not yield accurate methods, no matter what kind of statistical models or extra annotation efforts are used. We will simply never have enough annotated data. Moreover, the representations in such annotated resources often do not provide abstractions suitable for reasoning, and, consequently, are not useful for applications. In order to tackle these challenges, we need to rethink the semantic parsing problem, including understanding what kind of data and knowledge we can rely on in learning parsers, and developing a new framework for inducing semantic parsers from this data.

In my VIDI project, I aim to introduce such a framework. The key idea of the project is, to induce semantic parsers from the un-annotated data (for example, the huge amount of text available on the Web), rather than relying on annotations provided by linguists. Moreover, rather than modelling sentences in isolation (as standard in NLP), we will model relations between facts, both within and across different texts. We will also use links between texts and facts present in knowledge bases. This “linked” setting allows us to both discover inference rules (i.e. learn that one fact implies another) and induce semantic representations more appropriate for applications requiring reasoning.

Unlike previous approaches, instead of using annotated data as a ground truth, we will incorporate evidence from such data (as well as other forms of linguistic knowledge) as soft constraints to guide induction of semantic representations.

About getting support

I was very excited that the proposal received support of the NWO. Diego Marcheggiani – a new post-doc at the ILLC – and I have just started with the project, and soon we will be joined by a new PhD student. I am sure that this would not have happened without the support and advice of numerous colleagues at the ILLC (and beyond). My advice to future applicants would be to use these opportunities, and interview your proposal and your ideas not only with your close colleagues, but also with researchers outside of your community. Interestingly and somewhat surprisingly to me, some of these discussions have not only improved the presentation but also sharpened the ideas and affected some of the research questions we will be studying.

To study these issues, we will look at large amounts of data from actual conversations and will develop formal and computational models inspired by ideas in psychology, sociology, and obviously linguistics.

Ivan Titov is an assistant professor at the ILLC. He works on natural language processing and machine learning, with a focus on statistical modelling for semantic parsing and natural language inference.

Asymmetry in conversation

About the project

I’m interested in investigating linguistic interaction, that is, I’m interested in how people use language to communicate with one another in spontaneous conversation. In particular, my VIDI project focuses on interactions where there is some prominent asymmetry between the dialogue participants. There are a number of illustrative examples of asymmetry. First, when a native speaker of, say, Dutch converses with a non-native speaker who is learning the language, there is a linguistic asymmetry (the non-native speaker has fewer linguistic abilities). Second, in a dialogue between a doctor and a patient, there is typically a knowledge asymmetry regarding the subject matter of the conversation (the doctor is an expert). Third, when a boss converses with a subordinate employee, there is a power asymmetry stemming from the social roles of the interlocutors (the boss is more powerful). Similar asymmetries are also present in human-computer interaction. For instance, when people talk to the intelligent personal assistant in their smart phone, several types of asymmetry materialise: the artificial agent has more limited linguistic abilities and (hopefully) less social power, although it may have more knowledge on certain domains (e.g., on how to get to a particular location).

The research programme that I propose in my VIDI project aims to understand how communication takes place in asymmetric situations such as those mentioned above. We want to uncover the dialogue features that help us to communicate better and that contribute to bring about change – for instance, how does linguistic interaction between humans or in human-computer interaction contribute to language learning, to boosting domain expertise, or to social persuasion?

Raquel Fernández is an assistant professor at the ILLC and the leader of the Dialogue Modelling Group. She works on computational semantics and pragmatics, and her main focus is on linguistic interaction.

About the selection process

Given the interdisciplinary character of this type of research, I decided to submit the project proposal to the interdivisional section of the NWO (rather than to the Humanities or the Sciences divisions, which could also have been appropriate). This was not an easy decision to make though, and I kept changing my mind until the very day of the submission deadline.

As scientists, we are often more comfortable speaking about the details of our research to a specialised audience. But, personally, I also enjoy the challenge of making a topic accessible and exciting for a mixed crowd. Thus, I finally decided to go for this option. Overall, however, I don’t necessarily recommend this strategy: contrary to what most people (including myself) tend to assume, the success rate within the interdivisional section is often lower – in this round, the success rate was five percentage points below the average success rate across all NWO divisions. The committee who interviewed me included computer scientists, philosophers, astronomers, historians... They gave me a hard time during the interview – to the point that I was 95% sure I would not get the project. It therefore was a huge surprise to receive the good news in the end!

The project will get properly started in 2016, with a PhD student and a postdoc later on joining the team. I’m excited about the possibilities this opens. Besides the concrete research we will carry out during the project, perhaps most importantly, I see the VIDI grant as an opportunity for establishing a new research group at the ILLC – the Dialogue Modelling Group – dedicated to investigating linguistic interaction using a varied toolbox, including empirical, formal, and computational techniques. Exciting times.
Inquisitiveness below and beyond the sentence boundary

Floris Roelofsen is an associate professor at the ILLC. His areas of interest include formal semantics, pragmatics, the interface between syntax and semantics, and intonational meaning. His main focus is on inquisitive semantics.

Problem description
Language is the primary means of human communication. The interpretation of linguistic expressions has been investigated from various theoretical perspectives, ranging from linguistics and philosophy to logic and cognitive science. Insights from these investigations have led to many practical applications in computer science, ranging from automated reasoning to dialogue systems and search engines.

The focus in this endeavour has predominantly been on assertions. However, an equally important role in communication is played by questions. Neither assertions nor questions can be fully understood in isolation, since assertions may involve embedded questions (e.g., “Bill asked me who called”) and questions may involve embedded assertions (e.g., “Who told you that Susan won?”). Moreover, the interpretation of an assertion often depends on the question that it addresses. For instance, if you ask “What did you do this morning?” and I respond “I only read the newspaper”, then you can conclude that I did not do the laundry. But if you had asked “What did you do this morning?”, my assertion would not have warranted that conclusion.

These observations show that we need a semantic framework in which questions and assertions can be analysed in an integrated way.

Inquisitive semantics
The framework of inquisitive semantics, developed recently at the ILLC, addresses this need. It is based on a new logical notion of meaning, which does not only capture the information that a sentence provides (which is what the traditional notion does) but also the issues that a sentence may raise. The logical and philosophical foundations of this generalised notion of meaning have been investigated intensively in recent years, and a number of linguistic case-studies have demonstrated its potential to shed new light on the interpretation of questions and many related constructions across a wide range of languages. However, in order to develop the fundamental building blocks that are in place right now into a full-fledged framework, a number of significant steps are yet to be taken. Two of these, in our view the most urgent ones, will be pursued in the proposed project.

Below the sentence boundary
First, we need to understand how the meaning of a sentence is built up step-by-step from the meanings of the words that the sentence consists of. In the traditional, information-centred setting, this problem was first addressed in the 1970s by Montague. This work is seen as one of the major breakthroughs, if not the major breakthrough, in the history of the field. Our aim will be to generalise Montague’s approach to the inquisitive setting, where not only the information that a sentence provides has to be determined step-by-step, but also the issues that it may raise.

Beyond the sentence boundary
Second, we need to understand how the interpretation of a sentence may be influenced by preceding sentences in the discourse. For instance, if I say “Bill called” and then continue “He found a house”, the first sentence affects the interpretation of the second by fixing the referent of the pronoun “he”. The example about the newspaper above, where the interpretation of my assertion was partly determined by your preceding question, is another case in point. In the traditional, information-centred setting, this problem was first addressed by Kamp, Heim, and Groenendijk and Stokhof in the 1980s. This led to a dynamic conception of meaning, which identifies the meaning of a sentence with its potential to change the conversational context, rather than just the information it provides. This shift in perspective constituted the second major breakthrough in the field. Our aim will be to develop a dynamic inquisitive semantics, and to show that such a framework sheds new light on a range of long-standing issues involving the interpretation of questions and assertions.

Academic impact and practical applications
Besides substantially advancing current semantic accounts of questions and assertions, the envisaged framework is expected to have implications for epistemology and cognitive science as well, and to facilitate new practical applications in automated reasoning and dialogue systems, which will be pursued in collaboration with two industrial partners (Oracle and LogicBlox).

‘Grant writing is really fundamentally different from your usual research: it is not primarily about finding solutions, but rather about finding problems.’

Some grant writing tips
Many things about grant writing are rather obvious: start well in advance (I started thinking about this project about two years before submitting it), make sure you have already done some preliminary work that shows the potential of the approach that you would like to pursue, seek the right balance between novelty and familiarity, i.e., look for unexplored territories but make sure that the project is feasible and that the reviewers and committee members still recognize the kind of enterprise that you are proposing.

Besides these, I can think of two things that are perhaps less obvious for people writing their first grant proposals. First, it is good to keep in mind that grant writing is really fundamentally different from your usual research: it is not primarily about finding solutions, but rather about finding problems. And second, try to use many concrete examples. I used examples like the one above about the newspaper in my VIDI proposal. The first time that someone suggested that I should use more concrete examples – I think it was either Jeroen Groenendijk or Frank Veltman, when I was writing my VENI proposal – I thought it would make the proposal look “too simple” and blur the generality of the ideas proposed. But in fact, when you pick the right examples, they help enormously in clarifying what it is that you would like to do and why that is so interesting and important.
Amélie Gheerbrant

You joined the ILLC in 2007 as a PhD candidate. Before, you finished two Bachelor programmes and you hold Master’s degrees in Cognitive Sciences, Philosophy and in Artificial Intelligence. How did you end up studying in so many different areas?

Back when I was in high school I was obsessed with one very specific question: what exactly is “meaning” and how do we manage to articulate it? I was a greedy reader and in order to tackle the question I started reading a lot of Philosophy and Anthropology (Merleau-Ponty, Levi-Strauss, many feminist classics from the 70’s...). In the process, I became really attracted by the Philosophy of Mind and Epistemology. I also heard about Logic as a topic. It was very vague at the time for me, but I really liked this idea of stripping to the bone the mere ideas of concept and object (Leibniz, Frege...). So I found a special programme that allowed me to study both Philosophy and Logic and I went for that. In doing so, I ended up realising that I liked writing proofs more than writing philosophy and I decided to go more seriously into that. Hence the three Masters...

Amélie Gheerbrant

Why did you decide to do a PhD and why did you choose the ILLC to do it?

I decided to do a PhD because I wanted to become a researcher. So when I heard about an open position at the ILLC – which I knew of already – I applied. I was lucky enough to get the job. Given my interests at the time, I felt the place was the right one for me.

Please explain in a few sentences the main topic of your PhD project.

I was recruited in the context of a broad European project oriented towards Logic and Games. I was given a lot of freedom and I could even pick my supervisors. I ended up working with Johan van Benthem and Balder ten Cate on Logic in Computer Science. More precisely, I focused on model-theoretic aspects of a variety of logics on finite trees. These are especially of interest in the context of programme verification and database theory. So I progressively discovered those communities and I started feeling at home there.

How was your experience at the ILLC, both academically and socially?

The openness of the ILLC allowed me to find my own academic way. I also built two very strong friendships with Gaëlle Fontaine and Olivia Ladino, who were also doing a PhD there at the time. We were colleagues, friends, flatmates... We were also working voluntarily at the O.C.C.I.I., a great independent music venue that matters a lot to us.

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‘Although business consultants are not fond of dwelling on the paradoxes of philosophy, mathematics or logic they certainly do strive to be logical thinkers.’

Nikhil Maddirala

You graduated from the MoL programme in 2014. Can you tell us about your (academic) background leading up to your masters at ILLC?

My high school studies in Hyderabad, in India, were devoted exclusively to mathematics, physics and chemistry, and then I began college at the University of Chicago hoping to major in mathematics or physics. While I was immediately captivated by the rigour of college level mathematics, I also began to develop a misguided picture of an epistemological hierarchy according to which mathematics provides the foundation for physical science, which in turn provides the foundation for life science (and social science and so forth…).

It was this view, coupled with a curious predilection for foundations on my part, that motivated me to ascend into (what I thought was at the) the deeper levels of this hierarchy: the foundations of mathematics, set theory, logic and eventually philosophy.

At Chicago I ended up majoring in philosophy and also ended up datapointing the aforementioned hierarchical picture of human knowledge (under the influence of philosophers such as Wittgenstein and Sellars), but logic and mathematics were crucial pathways along the intellectual journey leading me there, and it was a desire to revisit these pathways that brought me to the Master of Logic programme at Amsterdam.

How was your experience in the MoL programme, both academically and socially?

The two years that I spent as a Master of Logic student in Amsterdam have undoubtedly been the most intellectually stimulating and inspiring years of my life. My experiences were primarily shaped by people of the ILLC community and the MoL programme in particular. It was wonderful to be part of a community comprising such a diverse range of academic, social and national backgrounds all of whom are bound together by a common intellectual pursuit. “A Chinese computer scientist, an Indian philosopher, a German mathematician and an American linguist walked into a bar in Amsterdam…” might sound like the beginning of a formulaic joke, but it was a typical Friday evening for me as a MoL student, and I really enjoyed that. Besides, one of the incidental benefits of the programme is that I now have interesting friends from all over Europe (and the world!)

Soon after graduating from the MoL programme, you started working at Deloitte Consulting in India. What led you to join a consulting company?

The decision was driven partly by a disillusionment with academia as a career path and partly by a desire to explore new things. Unlike academia, working as a consultant allows me to constantly explore new industries, functions and even geographies & cultures as I move from project to project. Although I’m still very much interested in philosophy and logic, I’m happy to pursue those interests as personal projects or hobbies rather than as a career: this year I attended two academic conferences in philosophy and logic (I even presented a paper at one of the conferences), completed an online course in mathematical philosophy and worked towards co-authoring a popular philosophy article with a former classmate.

Consulting firms are in the business of helping their clients (typically large corporations) solve complex business problems across a range of issues such as growth strategy, business model transformations, mergers and acquisitions, etc. For example, a client may approach a consulting firm with the following problem statement: “Our company is considering a merger or acquisition as a means of entering the European market and we need some advice on how best to approach this decision.”

After some exploratory conversations, the project manager will put together a small team of two to five junior level consultants (such as myself) to work on such a project, the duration of which is typically anywhere between six weeks and six months.

Most of our team’s working time is spent on (1) research, (2) analysis and (3) reporting. The research consists of information and data collection through a combination of primary research (sourced directly from clients or subject matter experts through email exchanges, phone calls and / or live meetings) and secondary research (sourced online from research databases, analyst reports, news reports, etc.). After collecting the data and information, the output is analysed qualitatively and quantitatively in an effort to determine whether our working hypothesis should be rejected or not. Finally, we spend a lot of time reporting our analysis in the form of a logically structured and convincing presentation (with nice visualisations, etc.). The whole process is iterative and collaborative, with regular meetings to ensure that everyone on the team is on the same page.

Once the project is completed, you may choose to take a short vacation before moving on to a new project (which may involve a completely different client / industry / geography / team). As a junior level consultant, you start out as generalist and have a lot of freedom to explore different industries and functions; however, as you progress further in your career path you are expected to develop some kind of specialisation, e.g. you may become an expert in growth strategy for technology companies.

Was it hard to adapt to the business world? (Is it very different from academia?) What do you like most about it? What do you like the least?

Business consultants and academics are both two species of the same genus: knowledge workers, i.e. workers whose main capital is knowledge. The above described process of research, analysis and reporting should be familiar to almost any knowledge worker, including academics. The main difference is that business consultants put a lot more emphasis on optimising the economic, organisational and operational parameters of their work. What I like most about the business world as opposed to the academic world is the fast paced and vibrant work environment which allows me to explore a wide range of industries, functions, geographies and cultures. What I like least about the business world as opposed to the academic world is that I do not feel a strong sense of ownership over my time and my work, because I am always working with problems and constraints defined by my clients whereas in the academic world I enjoyed the freedom to define my own problems and constraints.

But then again, perhaps this view of academic freedom is a bit too idealistic and does not account for the pressures of peer reviewers, tenure review boards, grant committees, etc.

How does your academic experience connect to your current work?

Although business consultants are not fond of dwelling on the paradoxes of philosophy, mathematics or logic, they certainly do strive to be logical thinkers. This is evident in the internal training programmes that one often sees at consulting companies with course titles such as “hypothesis based consulting”, “logical structuring”, etc. The skill of being able to translate a client’s real world business problem into a tractable logical and hypothesis based structure is one of the core skills of a consultant. Moreover, there is a very strong methodological connection between academic work and consulting in so far as the process of research, analysis and reporting is central to both types of work.

What is it like to be back in India, working as a business consultant (which is eminently suited to such a lifestyle). In the long term I also hope to find some way to combine my academic interests with my business interests, but I’m not entirely sure how I plan to do that. Perhaps I can convince business schools and corporations that future business leaders need to be trained in logic and philosophy?

What is it like to be back in India after studying in the US and Europe for several years? And what are your plans for the future in terms of where to live, career path, etc?

It’s certainly great to reconnect with my family, friends and hometown after several years of living abroad. However, having been raised as a third culture kid (Wikipedia: “children who were raised in a culture outside of their parents’ culture for a significant part of their development years”) and having lived nearly half of my life abroad, I tend to suffer from the syndrome of feeling at home everywhere and therefore nowhere, so it’s very difficult for me to say where I want to live in the future! At least in the near future, I imagine that I’m best suited to lead the globetrotting lifestyle of a so-called “global citizen”, and this goes hand in hand with my plan to continue working as a business consultant (which is eminently suited to such a lifestyle). In the long term I also

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In the course of 2016, the ILLC will have existed for 25 years as an official research institute of the University of Amsterdam. That is something to celebrate; but actually, the ILLC was founded 30 years ago as the ITLI: the Institute for Language, Logic, and Information. (The acronym represents the Dutch name “Instituut voor Taal, Logica en Informatie”). Back then it was not an official institute; it was just a bunch of people from different faculties who wanted an institute. They co-operated a lot, more so with each other than with colleagues from their own faculty. They taught courses together, they wrote textbooks together, they organised a big conference every two years, they participated in a huge European research project3 – they did all kinds of things that people in real institutes do.

Yes, we badly wanted an institute of our own. Aside from our desire to collaborate, there was also a political reason for this. The mid-eighties were years of large budget cuts – up to 20% – at the Dutch universities, and since logic did not belong to what was considered the core business of either the Faculty of Philosophy or the Faculty of Mathematics, and since computational linguistics was considered to be of only marginal interest to the Faculty of Arts, for all of us there was the constant danger of being made redundant. So, why not join forces in a new interdisciplinary institute and become our own “core business”? That’s how it all started; we just bluffed our way into the administrative system, putting the institute’s name and logo on all of our letters, research reports, slides, and announcements.

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Not everybody could appreciate this. Some of our colleagues in Utrecht wrote an angry letter to the board of the University of Utrecht and the board of the University of Amsterdam, accusing us of false advertising and of unfair competition. But this did not stop us. And in 1991 the Institute became real. Well, there are just vague memories. It would be good if somebody sorted out the details. Isn’t this 25th anniversary a good occasion to do so? I forgot, for example, who decided on the name “Instituut voor Taal, Logica en Informatie”, although I remember endless fights about the word order: what should come first, “Taal” or “Logica”? If I remember correctly, the reason “Taal” was chosen was because the acronym “ITLI” sounded better than the acronym “ITLT”. I would also like to know who devised the ITLI logo (see figure a). Some of us spent many office hours designing the ideal logo, but I forgot who won. My own design, if I remember correctly, looked a lot like the one in figure 1, but it did not have these fancy shadows. Who added these? When, in 1991, the institute’s name changed to the ILLC we needed a new logo: see figure b. Who was responsible for that one? Next, in 1994, we got a logo designed by a professional graphic designer (see figure c), probably because the one from 1991 looked too amateurish. And in 2000, the logo changed again (see figure d). That one is definitely the prettiest of them all. It is still used in the dissertation and on the ILLC letter format. The university does not allow research institutes to have their own logo – for reasons of corporate identity they have to use theirs. Too bad.

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1 See for example L.T.F. GAMUT, Logic, Language and Meaning, Volumes 1 and 2, the Dutch version of which appeared in 1982.

2 Now known as the Amsterdam Colloquium, which had its 20th installment in December 2015.

3 This was the ESPRIT Basic Research Project DYANA (where “DYANA” is an acronym of “Dynamic Interpretation of Natural Language”), in which the universities of Amsterdam, Edinburgh, München, Oslo, Stuttgart, Tübingen, and Utrecht participated.

4 At the time these were all independent faculties.

5 Remember the following argument: ITLI sounds like “Italy”, the way CSLI sounds like “Sicily”. So… (Indeed, we wanted to have an institute like CSLI, the Center for the Study of Language and Information, that was founded in Stanford in 1983).
The world we live in is rather absurd, sometimes in a funny, sometimes in a grim, kind of way.

The technology around us is changing at a tremendous pace while the conceptions that each of us live by change much too slowly, if at all. Let me give you a couple of examples from academic life.

Ideally, computers and networks were aimed to make information much easier to store, retrieve, create and exchange. In fact, they have done this. They were meant to take the routine tasks—filling in forms, testing letters and reports and other paperwork—off our hands. Technology was also supposed to help us publish more, often in a faster and cheaper way. But the reality is that the way we publish has not changed much. Publishing is getting cheaper, but the same goes for the pace of reading. The effect of the new technology on our habits—reading less (there is not much the internet can offer to us when we read), wordier. We publish more, but we read less. We publish more, but we publish less. The internet can offer us in terms of the speed of understanding, what we need. Cheap mass production means that.

When the Russian government introduced a regulation that the electronic copies of all dissertations had to be put in a centralised database and made publicly available, it was typified bureaucratic measure primarily meant to show off. What it eventually led to was hardly intended by its initiators. It was envisaged that PhD dissertations would be brought to the public eye, a group of enthusiasts were meant to take the measure primarily meant to show off. What it eventually led to was hardly intended by its initiators. It was envisaged that PhD dissertations would be brought to the public eye, a group of enthusiasts were meant to take the

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Abroad, isn’t it!

The year 2016 will have a silver lining for the ILLC since we will celebrate our 25th anniversary. The institute has gone through many ups and some downs in this period: there have been various academic successes, many prizes and prestigious grants, but once or twice the institute also very narrowly escaped abolition...

Overall, the institute has grown quite a bit since 1991, while at the same time we managed to keep a very pleasant atmosphere. In any case, our silver jubilee is plenty of reason for celebration, and the preparations for festivities in the autumn of 2016 are under way. Yve Venema, Director
Imagine a game in which you need to guess the number between 1 and 9, and it is told you whether it is higher or lower than your guess. You can ask questions about the number until you find out what it is. If you ask many questions (in the worst case, 8), it takes a long time. Imagine that some of the answers are of the form ‘higher than x’.

For example, if the number is 2, you could ask the question ‘Is it higher than 1?’ instead of ‘Is it higher than 0?’

The above is a very basic property of our logics, since they do not abide by the rules of classical logic. They have a wide range of applications, even if not just TRUE and FALSE. They are called ‘many-valued logics’, but they are not always easy to handle, for they do not have the same effect of asserting the same thing two or three times does not have the same effect in the same way.

One can think of categorical dualities as taking different perspectives on the same phenomenon. Take for instance the wave-particle duality of light in physics: you can look at the behaviour of light at the wave level or at the particle level. Phenomena in mathematics, just as in quantum physics, can be viewed from different perspectives.

Put on your dancin’ shoes

Luca Spada is an assistant professor at the Department of Mathematics at the University of Salerno. He was a Marie Curie Fellow at the ILLC from August 2013 to August 2015. He discusses the application of his work in many-valued logics, along with some of his findings.

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Categorical dualities are the mathematical encapsulation of this change of perspective. There are many fundamental dualities, and many important dualities of mathematics are based on them, such as algebraic geometry, Fourier analysis, etc. Such duality for quantum physics, Boolean’s duality for distributive lattices, and Euler’s duality for Riemannian manifolds are pivotal results in the study of the corresponding logical systems.

In these, you can think of understanding the sub-totality of logical systems or ‘logical relations’ as being grounded in many-valued logics. One of the most surprising findings is that all these dualities can be seen as instances of just one general scheme! And once history repeats itself, this scheme was already introduced in the 17th century by René Descartes: all dualities as sub-totality of logical relations.

This can be read as saying that on the one hand, formulas in a logical system are points on which the valuation set (or, on the other hand, valuations on points on which formulas act), so valuations (truth tables for classical logic, possible worlds for modal logic) are points in a geometric space and logical formulas are subsets of this geometric space. This is best explained by taking a formula \( \phi \) and a valuation \( v \) depending on the propositional variables \( p_1, \ldots, p_n \).

This is best explained by taking a formula \( \phi \) and a valuation \( v \) depending on the propositional variables \( p_1, \ldots, p_n \). Since valuations commute with connectives one has that

### Put on your dancin’ shoes

Luca Spada

### References


For the last five years, Ulle Endriss has served as the programme director of the Master of Logic (MoL) in addition to his teaching activities and his research in computational social choice. At the beginning of the current academic year Maria Aloni took over as the new programme director, a responsibility on top of her teaching activities and her research in formal semantics. We asked Ulle and Maria to reflect on and anticipate their respective roles as MoL director.

Ulle Endriss

You were the programme director of the MoL for the past five years. Can you explain what your job as programme director consisted of?

As director, your job is to coordinate the various forces pushing and pulling at the MoL: (1) the students and the applicants, (2) the individual lecturers and the ILLC at large, and (3) the higher levels of the administrative hierarchy at the UvA, together with the support staff and infrastructure they oversee.

Concrete tasks include (re)presenting the MoL to the outside world, running admissions, proposing students for scholarships and awards, designing the overall curriculum, organising the internship activities and her research in formal semantics. We asked Ulle and Maria to reflect on and anticipate their respective roles as MoL director.

Maria Aloni

At the beginning of this academic year, you became the programme director for the Master of Logic (MoL). Why did you agree to take on this position?

I accepted because I am very proud of the programme and of the generations of researchers that it has generated. What do you think will be the most enjoyable part of being the programme director of the MoL?

I hope it will stay as it is, in the sense that the curriculum is a direct reflection of research at the ILLC (which itself may, of course, change a lot over time), and also in the sense that it attracts mature students who are able to handle the slightly rocky climate that this entails, rather than requiring a stream-lined programme designed by someone who thinks they know what every logician must know.

How do you see the (long-term) future of the MoL programme?

The MoL was in excellent shape when I took over and my goal was simply to keep it that way. I actually think that it is important that as director you don’t have too many personal ambitions. The MoL works so well precisely because everyone can do pretty much whatever they want. Do you have any tips for Maria?

Yes, of course: Maria, you need to learn some kind of party trick to impress the new arrivals.

Ulle: What do you think will be the most enjoyable part of being the programme director of the MoL?

The biggest challenge will be to manage to find enough time in the next five years to do significant research.

Maria: What are your goals for your five-year term as programme director?

The primary goal is to guard the scientific quality of the programme and I think that the best way of doing it is by continuing to facilitate the close connection between teaching and research within the ILLC. Let me add that I am allergic to inequalities at any level so I see it as one of my further personal objectives to arrive at a system where (i) opportunities and work load are more equally divided between the members of our two faculties, and (ii) the financial inequalities between European and non-European students are minimised.

Are you planning to make any (major) changes to the MoL programme?

I am not planning any major top-down change, but the programme will probably change in the following five years along with the research topics within the ILLC. In addition, I am investigating whether we can offer our students an even better training in preparation for the academic and the non-academic job market.

How do you intend to do even better than Ulle?

I don’t think I will be able to do anything better than Ulle, but there is probably one thing that might improve during my term: the quality of the pizzas at the introduction day and pizza evaluation.

I am very optimistic about the future of the Master of Logic. The combination of extremely talented students, excellent teachers and capable administrators has created a unique programme that will continue to form high-quality researchers with a broad yet in-depth preparation, well-equipped to meet the challenges of a complex and dynamic future society.

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Founded in 1985, the Master of Logic just had its 20th anniversary. The Master programme has received an “excellent” accreditation twice – in 2007 and 2014 – and Maria Aloni recently became its new director. These were some out of many reasons to throw a party! The ILLC invited staff, students and alumni to celebrate the master of logic and to thank its previous directors Dick de Jongh, Benedikt Löwe, and Ulle Endriss.

The event took place on the 7th of November 2015 in the classy North Sea Jazz Club in Amsterdam. Guests were treated to dinner, drinks, speeches and music. The night was expertly emceed by Master of Logic student Pablo Sierra Márquez. Speeches were held by the ILLC director Yde Venema, former Mol. directors Benedikt Löwe and Ulle Endriss, and by former and current Mol. students Raul Leal Rodriguez and Ottilia Kasbergen.

Not surprisingly, the speakers repeatedly voiced their gratitude towards Tanja Kassenaar – aptly addressed by Benedikt as “the mother of the Master of Logic” – for all that she does for the ILLC. In his opening speech, Yde spoke about the beginnings of the Master of Logic, and about how unique the programme truly is. The other speakers chimed in in harmony; the Master of Logic is something special, and we know how lucky we are at the ILLC.

Our new director and quizmaster extraordinaire, Maria Aloni, got the audience moving with a tough quiz on the history of the Master. There was a wide range of splendid musical performances. Unforgettably, the two barbershop quartets of the ILLC performed a medley of Mol.-themed songs. In the late hours, Groove Supplier proved to be a DJ who does indeed supply groove, and guests did not need to be asked twice to get on the dance floor.

The event was an all-round success. Sources even report that only 60% of conversations revolved around research or work – a record low for an ILLC social event.

MoL medley by Sirin Ozturk and Pablo Sierra Márquez to the tune of...

“I’m a Believer!” The Monkees
I didn’t believe their conjecture
How could x + y = z?
Their intuition seemed false, that’s what I believed!
A counterexample was my need
But then I saw their proof by contraposition. Not a doubt, Q.E.D.
So it’s true, I’m a believer – Couldn’t disprove it if I tried.

“Wannabe” Spice Girls
If you wanna be my student
You gotta read all my books
If you cite an author
It better be my friend
If you wanna be my student
I’ll never let you leave
I’ll make you work forever.
Even Christmas Eve

“It’s My Life” Bon Jovi
This is a song for the hardcore Fregeans.
It’s my Sign, and it has a reference
I’ll call it like that forever
I just really meant the evening star
It’s my sign.
My game is like an open language
Like Frege said
I call it my way
Don’t care if you meant the morning star
It’s my sign.

“Dancing Queen” ABBA
A machine with a tape and head
Computes everything.
It is said if it is the right function, it’s going to halt
But no there’s no guarantee
It is the Turing Machine
Needs no screen
Has no battery
Turing Machine – if it can’t solve it then nothing will (oh yeah)
Moves its head, reads the cell, then it might write something there might not halt
Can’t play games – it is the Turing Machine.

“YMCA” Village People
Logic – so fun you forget your lunch we said: logic –
We’re a passionate bunch
You can come here –
To the ILLC and forget all real life worries

*READ* *WRITE* *LEARN* *PROVE*
It’s fun to work at the ILLC
It’s fun to work at the ILLC
There are free pens and books in the main corridor
Hide them as you walk out the door

It’s fun to work at the ILLC
It’s fun to work at the ILLC
Rethinking the University

The year 2015 has been a tumultuous one for the University of Amsterdam. In their fight for a more democratic university, students made their voices heard, most notably by occupying the Maagdenhuis.

University wide, people were inspired by the students’ energy and courage, and many joined their cause. Also, at the ILLC these events have not gone unnoticed.

We asked MoL students Daan Mulder and Bas Cornelissen to recap the highlights of the events for us, and to describe their impressions of the appropriation of the Maagdenhuis. Along with this, we interviewed Tanja Kassaenar and Rens Bod – both ILLC-staff members – about their personal motivations to support the protests and to join the Rethink UvA group.

This is our Maagdenhuis

Bas Cornelissen and Daan Mulder

“This is our Maagdenhuis.”

Weeks, months, perhaps years of frustrations had culminated in this moment: around half past seven, on February 25th, 2015, the doors of the Maagdenhuis swung open. Three hundred students sat in the central hall. Hands waved orderly, but the tension was high. Louise Gunning, chair of the university's board of directors, had just arrived and summoned the crowd to leave: “This is our Maagdenhuis.” But for the next six weeks, it wasn’t. It would be our Maagdenhuis.

By first occupying the Bungehuis and then appropriating the Maagdenhuis, the protesters demanded the end of Profiel 2016 and the remnants of the Amsterdam Faculty of Science (AFS). But the main goal went much further: De Nieuwe Universiteit (DNU) wanted to thoroughly democratise the university. They aimed for a university that did not have the economy as its main shareholder and accountants as its policy makers. One guided by actual education, actual research and not by their superficial reflections: crude, imprecise and often misused indicators. Where democracy replaces technocracy and power again lies in the hands of students and staff.

One way to fight for a more democratic university is by demonstrating how it can be done. For that reason, the Maagdenhuis was an open space, largely freed from hierarchical structures. Inspired by the Occupy movement, most decisions were made in General Assemblies (GAs): meetings anyone could join and have an equal say in. Outside of the GAs, students and researchers pondered the problems of the marketised university – and often broader themes such as capitalism and climate change – in daily lectures, workshops, and discussions.

Yes, the appropriated Maagdenhuis was the university’s finest garden. Not because of its neat hedges and skilfully cut grass, but because of its wild flowers, the overgrown walls. After six weeks, first the police and then the gardeners returned to cut back all that lived inside.

Luckily, the seeds have spread. The Maagdenhuis protest was not an isolated coincidence. As many pointed out, it was a political event that divided what came before from what came after. Trivial as it may sound, the consequences are quite real. Large numbers of dedicated students and staff are now organized in action groups that have also permeated many student and workers councils. Indeed, the debates keep going, in the three committees, the Maagdenhuisdebatten, the freshly squatted student center Het Spinhuis or at De Omslag, an online platform we started ourselves.

But much, much more importantly, university politics is becoming political again. Something you can have opinions about, even if you’re not paid for having them. And evidently, people do have opinions about their education, their workplace, their research. The Maagdenhuis showed that bringing them together is the first thing you need to challenge the status quo. The second step is to seriously include these opinions in all decision-making, to give them actual power. After all, we at the ILLC have the clearest view on what improves our own education and research and what does not. Our task is to debate the issues we are facing, to propagate the conclusions and, critically, to fight for a system where they will be heard. We should not follow rules, but derive them ourselves.

The original, extended version of this article can be found at bascornelissen.nl/maagdenhuis.

About the authors: Bas Cornelissen and Daan Mulder are students of the Master of Logic programme and have been involved in the student protests. They founded De Omslag (omslag.nu), an online platform for debates about the university at large.
Could you introduce yourself?

I studied biology at the UvA back in the eighties when it was still the Gemeenteleke Universiteit, graduating in 1989. In 2002 I returned to the UvA as a secretary at the ILLC and am now the spider in the web for both the Master of Logic and the ILLC’s PhD programme.

In March 2015, you wrote an email to the ILLC staff members, encouraging them to get involved in the university. When did you start supporting the student protests and Rethink UvA?

My daughter is studying Classics at the Faculty of Science. It was back in the eighties when it was a university as a company and not a forum. Rethink UvA believes that therefore a structural reform is needed where decisions are made on academic grounds. We are aware that such a reform cannot be carried out locally, at a UvA-level only, but needs to be operated at a national and perhaps even at an international level. Keep in mind that Rethink UvA’s a movement: it has no internal structure or hierarchy, it is a forum.

When did you first join Rethink UvA and what motivated you?

On the day that UvA-employees visited the students (mainly from Humanities Rally and De Nieuwe Uni) at the fresh occupation of the Maagdenhuis, I joined Rethink UvA – the name didn’t exist yet on that day, but I helped to coin the name. The picture on the original website of Rethink UvA (rethinkuva.nl) shows me sitting and pondering that day (the person at the very left). During that particular joint staff/students meeting I was the first staff member to speak and spoke out in favour of the students, and told them how proud I was of them. But at the same time I also told them that I was seriously concerned about the fact that the occupation of a building is an illegal act. I mentioned the dilemma of civil disobedience that we all may face. I also thought that initially my words found rather broad agreement; this changed quite a bit, however, when I stated that according to my opinion it would be a mistake to communicate with the CvB (governing board). I argued that we should try to find a compromise rather than create a division. I remember that from that moment onwards at least one students or staff agreed with me, which was perhaps understandable given that the occupation had just taken place. I am happy to see that in the course of the weeks after the occupation, the willingness to negotiate with the CvB increased very substantially; to the point that the CvB took very seriously all the demands from the students and staff.

Could you introduce yourself?

I am a professor of Computational and Digital Humanities and affiliated with both the Faculty of Humanities and the Faculty of Science.

You are involved in Rethink UvA, a university-wide platform of UvA staff members that was formed in the time of the student protests. Could you briefly explain the objectives of Rethink UvA?

Rethink UvA believes that ruling a university as a company is a fundamental mistake. The introduction of so-called New Public Management in universities (and many other places) in the late 1980s has led to choices guided by financial returns rather than by scientific and scholarly needs. The university is not a commercial company and cannot be ruled as such. Rethink UvA believes that therefore a structural reform is needed where decisions are made on academic grounds. We are aware that such a reform cannot be carried out locally, at a UvA-level only, but needs to be operated at a national and perhaps even at an international level. Keep in mind that Rethink UvA’s a movement: it has no internal structure or hierarchy, it is a forum.

Interview Rens Bod

Interview Tanja Kassenaar

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What, in your view, have been the successes so far?

The two main successes are the creation of two committees: one on governmental transparency ( Democratizam en Decentralisatie ) and one on finances. The members of these committees come from Humanities Rally, De Nieuwe Universiteit, UvA-Rethink, the Unions, and the students and workers council. The committees have just started their work, and it has been agreed with the CvB that the outcomes and recommendations of these committees will be taken over by the university. This promise by the CvB is actually quite amazing. If you think about it, and I’m very grateful to all (and I really mean all) parties for this achievement. But of course, the actual achievement will only become visible when the committees have completed their work.

Another major but more informal success is the observation that people at the UvA – from students to employers – dare to speak out without having to fear for their position or job. I remember that colleagues from other universities asked me whether I was afraid to air my opinion so frankly and directly. Well, if there was any reason for this at all, then it has been shown to be unjustified.

Do you have any advice for your colleagues or for students who would like to contribute?

Vote Rethink UvA for the medezeggenschapsraad! * This picture is shown on page 38.
Beyond the realm of logic, language and computation

The ILLC is a rich source of talent and experience, reaching far beyond the realm of logic, language and computation. Here we reveal what students and staff do in their leisure time.

Role playing games

Pablo Sierra Márquez

In a role-playing game – this particular one is set in the world of Mad Max – the director, sometimes called the dungeon master, develops a world and a plot in which the players get immersed. Each player has their own character to interpret. They find themselves in the middle of this imaginary scenario that they have to ameliorate by making the right decisions. The success of their decisions depends upon the outcome of the dice and the ruleset of the game they have chosen. Role playing games are not like usual games, as there are no winners or losers; it is all about creating a good story and having fun with your friends each week.

Played by Julian Schlöder, Esteban Landerreche, Christopher Badura, Dan Frumin, and Pablo Sierra Márquez on Thursdays.

Our men in Havana

Olim Tuyt

We are “Our Men in Havana”, the ILLC’s very own male barbershop quartet, currently consisting of three MoL students and one PhD candidate. Whenever we want a break from our daily logic, we apply our logical thinking to the singing of some nice a cappella harmonies. Traditionally, the barbershop harmonies consist of 4 a cappella voices, although we might sometimes bend the rules a bit – especially with our performance of John Cage’s 4’33". If you are interested in joining us and upholding the tradition of a male MoL barbershop quartet, let us know!

Our Men in Havana consist of Daan Mulder (bass), Tim Coopmans (baritone), Olim Tuyt (tenor) and Guillaume Gna (lead).

ENTOMOLOGY

3 OUT OF 4 CREATURES ON THE PLANET ARE INSECTS

Karine Gigengack

ANTS: WW > 12000 known species; @NL: 47 native species; @my home: 2 species, Harvester ant & Black garden ant. Ants are social insects, so also my ants are neat and stay in their nests, they behave! (as long as I feed them….) Say ants, see E.O. Wilson[1], myrmecologist, here standing next to the nest[2] of red wood ants – these you can’t see, too tiny… EARWIGS: WW > 1800 known species; @NL: 5 species; @my home: a species, Sand earwig & European earwig[3]. Unusually for non-social insects, earwigs take maternal care of their breed – great to look at. I collected mine at the same location Donald McGillivray[4] (correct!) collected his a 100 years ago. Though all earwigs look a bit the same, their pincers[5] can vary much in shape and size from species to species and even between males and females – showing Nature as great sculptor.
Classical dressage

Zoe Christoff

I found my horse Haro in 2013 during a dressage training week in the south of Spain. After contemplating the idea for a year, I finally bought him last year and brought him to Amsterdam. He stays in a cozy stable in Diemen, just a fifteen minute bike ride away from Science Park. I train him in classical dressage four to five times a week. Of course it is a very time-consuming hobby, but ultimately it helps me stay focused during my daily logic work. Just like logic, dressage requires you to be precise, rigorous and consistent. Otherwise, the horse will misunderstand you. But you also need to be completely present in the moment, physically and emotionally. It is a bit like meditation, I think.

Climbing

Iris van de Pol

Quite a few people at the ILLC enjoy climbing or bouldering. We managed to get some of them together on a rainy Sunday afternoon. In this picture you see (from left to right) Daan van Stigt, Line van de Berg, Jakub Szymnik, Shimpei Endo, and Giovanni Cinà.

It’s the desire for adventure that draws most of them to this hobby. Daan adds that climbing is like a puzzle that you solve by finding the right position for your body. In a way it is like logic. There is a goal that you want to reach, and at first that seems impossible. Then you break it up into smaller pieces, and you try out different ways of getting there. In the end, you solve it!

No Almonds, just barbershop

Otillia Kasbergen

You might have heard our sugary voices echo through the hallways of Science Park 107, late on Wednesday evenings. Our quartet No Almonds came into existence by the unprecedented passion of Eileen Wagner for barbershop singing. Originally, the quartet existed of Eileen (bass), Otillia Kasbergen (lead), Suzanne van Wijk (baritone), and Leanne Streekstra (tenor). Since Eileen moved to Berlin, her place as bass was gracefully taken by Paula Henk. The main objective of No Almonds is to transcend our pain and worries by getting into a state of musical ecstasy. We don’t need drugs, we don’t want almonds, we just do barbershop.
Internship at Xerox

Phong Le is a third year PhD candidate under supervision of Jelle Zuidema and Rens Bod. During the fall of 2015 he went on an internship at Xerox Research Centre Europe, in France. We interviewed Phong about his experiences when he was halfway through his stay.

Where are you doing your internship? I am now at Xerox Research Centre Europe (XRCE), in Grenoble, France.

How did the selection process go? The selection process was very simple. There was an interview, but nothing challenging like IQ tests or coding quizzes. (I am rather curious how competitive it was, but I think it is better not to ask.)

Was it easy to convince the ILLC to approve your internship? I am unsure because Jelle helped with this process. But, as far as I know, the ILLC and the Faculty of Humanities were extremely supportive. I appreciate their assistance very much. Honestly, it was more difficult to convince myself to leave my office, Fl.25. :-)

How is life in the company? Is it very competitive? It is hard to pick a best moment because most shops and restaurants are closed on Sunday. So, instead of enjoying delicious French food, I had no choice but to get burgers from McDonald's.

The worst was when I arrived in Grenoble. The city looked dead because most shops and restaurants are closed on Sunday. So, instead of enjoying delicious French food, I had no choice but to get burgers from McDonald’s. It is hard to pick a best moment because I have had many good ones. It might have been the moment when I realised that I would get to visit Barcelona.

From the time of publication of the last ILLC magazine in December 2014 to December 2015, 10 PhD students and 9 postdocs have joined the ILLC.
The vagueness between right and wrong, understanding and misunderstanding, and how does this ambiguity influences us. What is your favourite game? World of Tanks and LoL. For what may we wake you up in the middle of the night? I am awake at midnight, haha!

Jouke Witteveen
PhD Candidate
Who are your supervisors?
Khalil Sima’an and Ivan Titov.
What is your academic background? I have a MSc from University of Glasgow.
What is your research topic? Neural machine translation, deep learning, statistical machine translation.

Frederik Möllerström Lauridsen
PhD Candidate
Who are your supervisors? Nick Beatson.
What is your academic background? I have a BSc in mathematics from the University of Copenhagen and a MSc in Logic from the UvA.
What is your research topic and what interests you about it? I work on the mathematics of non-classical logic: modal, substructural and substructural. Using the toolbox of duality theory and abstract algebra I try to characterise certain logical and proof-theoretic properties of non-classical logics in terms of properties of the corresponding mathematical structures. I enjoy this building of bridges between seemingly unrelated concepts from logic and pure mathematics.
What is your favourite game? I really like Amsterdam and I am happy to stay here for the next four years. What I like most about it is that it is so incredibly国际化的 that I do not feel like a foreigner here. Do you have any crazy, fun or ridiculous hobbies? I am excited about the idea of traveling international that I do not feel like a foreigner here. Do you have any crazy, fun or ridiculous hobbies?

Chenwei Shi
PhD Candidate
Who are your supervisors? Jingdong Bian, Sonja Smets and Fenrong Liu.
What is your academic background? I received both my bachelor degree in Philosophy and my master degree in logic from Tsinghua University.
What is your research topic and what interests you about it? Brodly speaking, my research topic is formal epistemology. Speaking more broadly, formalizing everything interests me.
What is your favourite game? Basketball
For what may we wake you up in the middle of the night? Zombies are coming. Do you have any crazy, fun or ridiculous hobbies? Watching zombie movies and taking photos. Neither is crazy or ridiculous, just fun.

Nadine Theiler
PhD Candidate
Who are your supervisors? Prof. Khalil Sima’an.
What is your academic background? I finished a Bachelor degree in Mathematics, then a Master of Science degree in Software Engineering. I did some research work on machine translation evaluation, word segmentation, entity recognition and other related NLP topics during the Master stage in NLPCT laboratory.
What is your research topic and what interests you about it? Here at the ILLC, I am participating in Khalil’s project of teaching computers to translate by themselves. So, I mainly focus on the semantic machine translation and MT evaluation. The most interesting point is to explore the semantic models and features for the state-of-the-art machine translation systems. We have been focusing on paraphrasing models recently as a semantic tool. What do you like and dislike about Amsterdam? I like the rivers and parks a lot. I do not like the cold weather in winter. Do you have any crazy, fun or ridiculous hobbies? I like jobbing, swimming, reading.

Arnold Kochari
PhD Candidate
Who are your supervisors? Robert van Rooij and Jakub Szymank.
What is your academic background? I majored in psychology during my bachelor studies at Charles University in Prague and did a research master’s programme in Linguistics at Utrecht University afterwards. I am very much an experimental psychologist interested in brain and language processing and will need to catch up on logic while at ILLC.
What is your research topic and what interests you about it? During my PhD, I will be mainly designing and conducting experiments on context-sensitivity and vagueness in linguistic processing by human subjects. I will start by looking at processing vague adjectives (e.g. big or tall) and quantifiers (e.g. many and few) and then see where the results and my thoughts take me. I am very excited about the topic, because vagueness is a pervasive feature of language, but almost no research has been conducted on it in psycholinguistics. The project is part of Language in Interaction consortium and I will be conducting my experiments at Donders Institute for Brain, Cognition and Behaviour in Nijmegen.
What do you like and dislike about Amsterdam? I really love Amsterdam and I am happy to stay here for the next four years. What I like most about it is that it is so incredibly international that I do not feel like a foreigner here. Do you have any crazy, fun or ridiculous hobbies? I am excited about the idea of traveling long distances by bike. Like traveling international that I do not feel like a foreigner here. Do you have any crazy, fun or ridiculous hobbies?

LiFeng (Aaron) Han
PhD Candidate
Who are your supervisors? Prof. Khalil Sima’an.
What is your academic background? I have a Bachelor in Computer Science, and a Master of Logic.
What is your research topic? My research topic is parameterised complexity analysis. My interests are centered around computability and randomness and the parameterised approach gives a nice handle on many topics in that area. What do you like and dislike about Amsterdam? It is either too hot or too much filled with tourists depending on where you are. Moreover, I find it hard to really get away from all the asphalt and concrete. The people at the UvA have surprised me, though, because of their shared aversion to hierarchical decision making.
Do you have any crazy, fun or ridiculous hobbies? I love to take my body to the extreme, like in “Abby knows where you can get the best ice cream around here”, and, finally, just fun.

Anton Frolov
PhD Candidate
Who are your supervisors?
Khalil Sima’an and Ivan Titov.
What is your academic background? I have a Bachelor in Computer Science, and a Master of Logic.
What is your research topic? Centred around computability and complexity analysis. My interests are

To be continued...
**Iris van de Pol**  
**PhD Candidate**

Who are your supervisors?  
Jukka Syaanink, Iris van Rooij, Nina Gierasimczuk, Ivan Toni, Johan van Benthem.

What is your academic background?  
I did a bachelor’s in philosophy in Amsterdam (and actually before that a bachelor’s - at an arts school - in theatre and drama in Tilburg), and the master of logic here at the ILLC.

What is your research topic and what interests you about it?  
My project is about cognitive modeling of reasoning (and non-verbal) communication, and possibly about the role of theory of mind. It involves a bit of logic (perhaps game theory), computational modeling, philosophy, complexity theory and cognitive (neuro) science. It’s exactly the interdisciplinary nature of the project that really interests me: I will get to do both formal stuff and actual (empirical) experiments.

Do you have any crazy, fun or ridiculous hobbies?  
As a hobby, I’m doing a yoga teacher training. It’s four years and I’ve almost finished the third year, which will allow me to give weekly lessons. I’m not yet teaching right now, but if you’re interested let me know. Perhaps we could organise something at the ILLC – I also recently started dancing rock ’n roll (with Gianni). It’s really fun and joyful, you should all join!

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**Tamara Dobler**  
**Postdoc**

Who are your supervisors?  
Martin Stokhof, Floris Roosdorp, Maria Aloni.

What is your academic background?  
Philosophy of language, philosophy of linguistics, Wittgenstein.

What is your research topic and what interests you about it?  
The project I work on at the moment is about radical contextualism, Travis cases (i.e. cases of ungrammatical contextual variation in truth-conditions) and their implications for the theories of natural language meaning.

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**Roberto Cluniz**  
**Postdoc**

Who are your supervisors?  
Prof. Alexandre Bajda.

What is your academic background?  
I graduated in Philosophy in 2003 at the University of Pisa. I also hold a MA in Humanities from the Scuola Normale Superiore in Pisa. I hold a PhD in Philosophy from the University of Florence (2008).

What is your research topic and what interests you about it?  
I work on the project ‘Ways of Doxastic Agency’, which has been awarded a Marie-Curie Post-doctoral Fellowship. The project aims at integrating the STIT (‘swing-to-it-that’) modal logic of agency with Dynamic Epistemic Logic. The rationale is that some relevant social phenomena involve a combination of agency (what agents accomplish) and belief change (what results from updating the agents’ information). Taken in isolation, STIT and DEL cannot model this combination, and while the investigation of agency, on the one hand, and information update, on the other, have reached a sophisticated level of understanding, a formal theory of their combination is missing. As a consequence, we have no clear conceptual and mathematical framework to capture distribution of responsibility among the agents involved in cases of action based on advice or testimonial belief. On the background of methods accumulated in decades of research in modal logic of agency and DEL, the project fills this lacuna and locates the problematic social phenomena in a framework of reference. What do you like and dislike about Amsterdam?  
It’s a cool place and I haven’t felt so comfortable in a city in years. One thing I do not like is scooters driving on the cycling lane, though.

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**Serge ter Braake**  
**Postdoc**

Who are your supervisors?  
Rens Bod (UvA) and Inger Leemans (VU).

What is your academic background?  
I received a PhD in medieval history in 2007, worked until the end of 2011 for the Jewish Historical Museum (mainly for the Digital Jewish Monument) and have called myself a digital humanist since 2012 when I started working on a digital humanities project at the VU. I wrote books on life and politics in The Hague in the sixteenth century, on the Jewish contribution to the Dutch leather industry and on post-war restitution processes of immobile goods. I also translated a key historical text of grand pensionary Johan de Witt into modern Dutch and was one of the main editors of proceedings on biographical data in a Digital World.

What is your research topic?  
I am part of the humanities branch of the large AAA Data Science project, in which I look at the changes of concepts and perspectives through time in digitised historical texts, with the help of computational methods.

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**Desmond Elliott**  
**Postdoc**

Who are your supervisors?  
Khalil Sima’an.

What is your academic background?  
I have a Ph.D from the Institute for Language, Cognition, and Computation at the University of Edinburgh.

What is your research topic and what interests you about it?  
I work on multimodal machine learning, in particular on modelling the relationships between images and descriptions. What is your favourite game?  
I like most games, especially co-operators like Pandemic or The Resistance.

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**Diego Marcheggiani**  
**Postdoc**

Who are your supervisors?  
Ivan Toni.

What is your academic background?  
I got my PhD in computer science from the University of Venice, Italy. During my PhD I worked as a researcher at the Italian National Research Council (CNR), and in particular at the Institute of Science and Information Technologies (ISTI). During this period I worked in a field at the intersection of information retrieval, natural language processing and machine learning with particular attention to probabilistic graphical models.

What is your research topic?  
Since I visited the ILLC last year my research interests turned toward semantic representation of text. For example, to make a computer understand who did what to whom in a sentence. Right now, I am focusing my research toward tensor factorization models for unsupervised discovery of relations between entity pairs.

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**Benjamin Rin**  
**Postdoc**

What is your academic background?  
I finished my PhD in 2014 at the department of Logic and Philosophy of Science, in the University of California, Irvine. During my PhD I worked as a researcher at the Institute of Science and Information Technologies (ISTI). During this period I worked in a field at the intersection of information retrieval, natural language processing and machine learning with particular attention to probabilistic graphical models.

What is your research topic and what interests you about it?  
I work on logic, computability, philosophy of mathematics, and the foundations of set theory. I am drawn to these topics because I find them to be deep and the questions raised within them to be of fundamental importance.
What is your favourite game?

It’s hard to pick just one. For now, I’ll say chess. But I also like a number of card games.

What do you like most about Amsterdam?

I like the cycling culture and the fact that the locals are generally friendly and helpful.

Bushra Jawaid
Researcher

Who are your supervisors?
Khalil Sima’an.

What is your academic background?
I am a PhD candidate at Charles University in Prague.

What is your research topic?
My PhD thesis is titled “Machine Translation with Significant Word Reordering and Rich Target-Side Morphology”. My recent area of interests include producing correct inflected forms when translating from morphologically poor to morphologically rich languages. I also like chess. But I also like a number of card games.

What do you like most about Amsterdam?

I like the cycling culture and the fact that the locals are generally friendly and helpful.

For what may we wake you up in the middle of the night?

Only if the house is on fire!

Do you have any crazy, fun or ridiculous hobbies?

My husband says that he finds me eating pizza all the time. He prefers if I count this as a ridiculous hobby and not as a fun or crazy one :-).