**CLASP Annual Report 2018**

Stergios Chatzikyriakidis and Shalom Lappin

February 15, 2019

**1 Introduction**

CLASP has been particularly productive in 2018. We have again expanded our staff and our PhD program. We organised the Gothenburg-Stockholm Workshop on Proof Theory, Model Theory, and Probability in Natural Language in February 2018, and the International Workshop on Dialogue and Perception in June 2018. Our members have published a significant number of papers in high profile international conferences, and they have given invited talks in a wide range of venues. Our four research groups are active, and they are helping to promote cooperation among our members across our core areas of scientific interest.

This is the third annual report for the Centre for Linguistic Theory and Studies in Probability (CLASP), covering our activities in 2018. We are grateful to the members of our Scientific Advisory Board, Alex Clark, Katrin Erk, and Joakim Nivre, for helpful suggestions on how to improve the presentation of information in our annual reports. We have implemented their recommendations in the current document, in which we cover

(i) staff and recruitment,

(ii) research activities, and our research groups,

(iii) international connections and collaborations,

(iv) scientific activities (workshops, conferences, and visiting

speakers),

(v) PhD program in computational linguistics,

(vi) budget,

(vii) plans for 2019, and

(viii) appendix with our publications

(ix) appendix with our budget spread sheet

Additional information on CLASP’s staff, students, and regular activities is available on the CLASP website at <http://clasp.gu.se/>.

**2 CLASP Staff and Recruitment**

Since January 2018, we have hired the following people:

1. Bill Noble, PhD student
2. Adam Ek, PhD student (starting 2019)
3. Vidya Somashekarappa, PhD student (starting 2019)
4. Jenny Tu, administrator (substituting for Susanna Myyry who is on parental leave)

CLASP is comprised of the following staff:

**Director of CLASP**

Shalom Lappin, Professor

**Research coordinator**

Stergios Chatzikyriakidis, Researcher and research coordinator (Docent in Computational Linguistics)

**Administrators**

Jenny Tu

Susanna Myyry (parental leave – December 2018 – January 2020)

**Researchers**

Robin Cooper, Senior professor

Simon Dobnik, Senior Lecturer in Computational Linguistics (Docent)

Christine Howes, Associate Senior Lecturer in Computational Linguistics

Staffan Larsson, Professor in Computational Linguistics (Docent)

Jean-Philippe Bernardy, Researcher (Docent in Computer Science)

Rasmus Blanck, Post-doc

Aleksandre Maskharashvili, Post-doc

Sharid Loáiciga, Post-doc

Asad Sayeed, Associate Senior Lecturer in Computational Linguistics

**Doctoral Students**

Yuri Bizzoni, PhD student

Mehdi Ghanimifard, PhD student

Wafia Adouane, PhD student

Kathrein Abu Kwaik, PhD student

Sylvie Saget, PhD student

Vidya Somashekarappa, PhD student

Vladislav Maraev, PhD student

Bill Noble, PhD student

Adam Ek, PhD student (starting 2019)

Vidya Somashekarappa,

**Associate Member**

Ellen Breitholtz, Researcher

**3 Research Activities and Research Groups**

In addition to our four established research groups, a Probabilistic Natural Language Semantics (PNLS) group consisting of Jean-Philippe Bernardy, Rasmus Blanck, Stergios Chatzikyriakidis, Shalom Lappin, and Aleksandre Maskharashvili has formed recently. It is developing a wider coverage compositional Bayesian semantics for natural language. The group is currently constructing a probabilistic NL inference system implemented within a probabilistic functional programming language, and they are building a test suite of example arguments to test this system. They are experimenting with different methods for sampling property spaces, represented as vectors, for predicate satisfaction. They have also applied for external funding to cover the two postdocs in the group for additional years of research.

**Dialogue Group:**

The Dialogue Research Group studies dialogue from a number of different perspectives, including experimental, computational, formal and qualitative methods. The main people in the group are: Christine Howes (group leader), Ellen Breitholtz, Robin Cooper, Staffan Larsson, Vlad Maraev, Bill Noble and Sylvie Saget. In addition, the following members of CLASP have research which overlaps with our area: Simon Dobnik, Yuri Bizzoni, Mehdi Ghanimifard.

Our research activities are as follows:

1. Research (for details on publications and presentations, please see appendices):

***IncReD:*** Incremental Reasoning in Dialogue (VR project) (Howes, Breitholtz, Cooper) – work continued on this project, and we also received funding from the department for Eleni Gregoromichelaki to join us as a guest researcher throughout spring. Details of the project and publications can be found on www.christinehowes.com/incred

*DRiPS:* Dialogical Reasoning in Patients with Schizophrenia (Breitholtz, Howes, Cooper) – work continued on this project, which had a very positive interim report delivered in Stockholm by Breitholtz and Howes in October 2018. Maxime Amblard received funding to come for a visit to discuss future collaborations. Details of the project and publications can be found on www.christinehowes.com/drips

*Dialogue Systems* (Larsson, Maraev, Saget): In 2018 we participated in several conferences and workshops, including the Swedish Dialogue Workshop (Dialogverkstad), IWSDS, AI-MHRI, IJCAI and HCI. We also planned several MA thesis proposals together with Talkamatic AB, a local spin-off from the dialogue group. Two of these, one of which also includes the participation of Digital Grammars, were chosen by MLT students and are currently being pursued for completion in 2019. Maraev was also employed (on a variable hour per month basis) to help with development at Talkamatic. Larsson is responsible for research at Talkamatic and works 20% there.

*Semantic coordination in dialogue* (Larsson, Noble, Jenny Myrendal): Work towards quantitative models of meaning change in interaction (Noble, Larsson). Work on dialogue protocols for utterances with perceptual meanings (Larsson). Project applications were filed by Larsson and Myrendal to Riksbankens Jubileumsfond and Marcus och Amalia Wallenbergs minnesfond.

*Common ground* (Saget, Howes) – explored from the perspective of a distinction between belief and acceptance (PhD Project - Saget), and from a corpus and formal perspective with a focus on feedback in dialogue (Howes, see also collaborations and publications).  We participated in several conferences and workshops, including Swedish Dialogue Workshop (Dialogverkstad), DIS, PRW, Research Workshop on Computer Simulations, HAI.

1. Reading groups:

*Dialogue reading group:* The group meets fortnightly and discusses key papers relating to dialogue. Papers are chosen and introduced by a different person each time, and have, in the past been linked to relevant CLASP invited speakers (e.g. Patrick Blackburn) with guest researchers also leading discussion. The coordinator of the reading group is Christine Howes, with Sylvie Saget taking responsibility for information flow (including e-mails and web editing). This role has been taken over by Bill Noble from December 2018. Saget also took on the full coordination role while Howes was on parental leave between April and October.

*Humour reading group:* As several of our group are interested in humour research as it relates to dialogue, Vlad Maraev has convened a reading group on formal theories of humour. This group meets approximately once a month, and has a core membership of Maraev, Breitholtz, Cooper, Howes and Larsson.

1. Guest researchers:

In addition to the CLASP invited speakers, we have welcomed a number of researchers for longer research visits to promote future collaborations. These include:

*Maxime Amblard* (as part of the DRiPS project)

*Eleni Gregoromichelaki* (guest researcher funded by FLoV; work on IncReD project)

*Mary Lavelle* (a co-investigator on the DRiPS project)

*Julian Schlöder* (invited by Breitholtz, Cooper and Larsson)

1. Workshops:

*Dialogue and Perception Workshop,* co-organised with the Language and Perception Research Group (Howes, Breitholtz, Dobnik). The aim of the workshop was to initiate a genuine dialogue between these related areas and to examine different approaches from computational, linguistic and psychological perspectives and how these can inform each other. It featured invited talks by leading researchers in these areas, and high level contributed papers, presented as posters, selected through open competition and rigorous review. A post-proceedings volume with extended papers on the themes of the workshop, to be published by CLASP papers in Computational Linguistics is currently being compiled.

1. Courses:

*Type Theory with Records* (PhD course led by Larsson)

*SDRT* (PhD course led by guest researcher Julian Schlöder)

*Modelling linguistic communication using**types* (ESSLLI 2019, Cooper, Larsson)

**Machine Learning Group:**

The machine learning group is headed by Asad Sayeed. 2018 is the year when the consolidation of the group as a CLASP research area was underway. The mandate of the group is construed broadly to include any use of statistical and data-driven techniques for the scientific study of language and its applications, and so touches on activities in all the other CLASP areas. Of particular focus, in additional to machine learning technologies, is the cognitive modeling of syntactic and semantic processing and statistical natural language processing technologies. The ML group is also deeply involved in teaching activities in the Master of Language Technology programme at GU.

*Reading group* **–** As one of the core ML group activities, 2018 saw the establishment of the “Machine Learning, Cognitive Modeling, and Natural Language Processing” (MLCMNLP) reading group. This group meets every two weeks and discusses papers from all the mentioned fields. Most CLASP members have attended the meeting at one time or another. Led by Asad Sayeed, it was co-organized in the spring by Yuri Bizzoni and in the fall by Vlad Maraev. It also features periodic participation from Devdatt Dubhashi’s group at Chalmers University. The reading group was given the status of a Ph.D.-level reading course for credit via a syllabus adopted by the department.

*Publication and presentation activity –* Asad published papers in LREC, CogSci, and \*SEM, as well as gave invited talks at a workshop on uncertainty in semantics in Poland and one at Johns Hopkins University. Asad also submitted a course proposal for incremental quantifier scope ambiguity resolution, which was accepted for ESSLLI 2019. Asad was also chief editor for the CMCL workshop proceedings

Sharid Loáiciga published papers at CRAC, NEWS18, and WMT workshops, and presented several posters without proceedings.

Bill Noble had one presentation at SemDial (AixDial) in 2018, as well as presented an internal seminar at CLASP. Sylvie Saget also presented internally.

*Within-Gothenburg collaborations* – The ML group collaborates inside and outside CLASP in the Gothenburg research community. Asad’s extensive collaboration with Devdatt Dubhashi and his student Mikael Kågebäck on colour communication at Chalmers resulted in a paper submitted to *PLoS ONE* which is now under revision. Asad started a new collaboration with Robin Cooper and GU linguistics researcher Ellen Breitholtz on modeling “dogwhistles” and adversarial political communication using reinforcement learning and game-theoretic techniques.

Postdoc Sharid Loáiciga, whose specialisation is in statistical NLP for event coreference, cooperates extensively with Simon Dobnik’s group to extend these techniques to the visual domain.

*Grant applications –* Asad submitted applications to the Riksbanken Jubilaeumsfond and the Swedish Research Council (VR) in studying incremental ambiguous scope interpretation in several languages. While it was rejected in both cases, it passed the first round of the RJ process and received comments in the second round. These applications are being revised and resubmitted.

In 2018, the planning process began for applications for new projects. Sharid started work on an RJ application for a project in coreference, and Asad started planning and preliminary research for an application with Ellen Breitholtz and Robin Cooper for a submission to a Wallenberg Foundation special call.

*Other activities –* The ML group became an associate member of the Nordic Language Processing Laboratory (nlpl.eu) and gained access to its computational resources and collaborative infrastructure. Asad is the designated representative for GU with NLPL.

ML group members were involved in the organization of the SSDL conference at GU. Asad was designated the workshops chair for IWCS 2019.

**Probabilistic Natural Language Semantics (PNLS) Group:**

The PNLS group is a new addition to our set of research teams. It is pursuing the construction of a compositional Bayesian semantics for natural language, implemented within a probabilistic functional programming language. It includes Jean-Philippe Bernardy, Rasmus Blanck, Stergios Chatzikyriakidis, Shalom Lappin, and Aleksandre Maskharashvili. Rasmus presented the group’s first paper, Baernardi et al. (2018), at the First International Workshop on Language Cognition and Computational Models, at COLING in August 2018, in Santa Fe New Mexico.

They are currently extending their prototype system to probabilistic inference in NL text, and developing a test suite of argument examples for evaluation of coverage and robustness. The group is applying for external funding to support the work of its two postdoctoral members for the next several years.

**Situated Language and Perception Group:**

In the Situated Language and Perception research group we are looking at formal and distributional models (and anything in between) of language used by situated agents interacting with each other, and with the physical world around them through action and perception. Its members include Simon Dobnik (group leader), Mehdi Ghanimifard, Robin Cooper, Staffan Larsson, Shalom Lappin, Wafia Adouane, Christine Howes, Ellen Breitholtz, Sharid Loáiciga, Yuri Bizzoni, Sylvie Saget, Vladislav Maraev, Bill Noble, Felix Morger (Department of Swedish, Språkbanken), and others. These are researchers who have collaborated on a joint publication in this area and/or doctoral students who have attended a PhD course organised by the group.

The research activity and publications of the group can be broadly categorised into the following areas: (i) computational models and meaning representations of language, action and perception, for example of spatial language and generation and interpretation of scene descriptions (Dobnik, Ghanimifard, and Howes), (ii) semantic models of language and perception (Dobnik, Cooper, Larsson, and Lappin), (iii) visual co-references (initial work by Dobnik and Loáiciga), (iv) processing contextually diverse language in the case of Algerian (Adouane, Dobnik and Bernardy), (v) multi-modal communication, dialogue and perception (Dobnik, Howes, Breitholtz, and Maraev). For specific publications please refer to the individual publication lists of the members attached in the appendix.

The research in the group exploits synergies with other research groups in the following areas: (i) with the Type Theory group: formal semantic models of language, perception and action; (ii) with the Dialogue group: models of language in interaction, i.e. dialogue; (iii) with the Machine Learning group: learning computational models of language and perception.

Other group activities:

* *Bi-weekly reading group* attended by both its senior and junior members, and members from other groups in Gothenburg, for example Språkbanken.
* *PhD courses:* (i) Language, Action, and Perception (APL), 7.5 hec organised by Dobnik, (ii) Representations of Meaning (ROM), 7.5 hec organised by Dobnik, (iii) Type Theory with Records: From Perception to Communication, 7.5 hec organised by Larsson, (iv) forthcoming Language, Action and Perception (APL-ESSLLI) ESSLLI-2019 course organised by Dobnik, Kelleher and Ghanimifard.
* *Workshops:* (i) Dialogue and Perception Workshop (DAP), co-organised with the Dialogue Group by Dobnik, Howes, and Breitholtz, 14-15 June 2018, Wallenberg conference centre, University of Gothenburg; (ii) The 3rd Workshop on Models and Representations in Spatial Cognition collocated with Spatial Cognition 2018, co-organised by Dobnik, Tyler Thrash (ETH Zürich), and John D. Kelleher (Dublin Institute of Technology), 5 September 2018; (iii) organisation of IWCS-2019 with Dobnik as a Local Co-organiser and Programme Co-chair, Larsson as Sponsorship chair, and Maraev as Student Track Co-chair.
* *Grant applications:* Dobnik applied to VR for a research project grant on *Learning language, action, and perception (LAP)* and Larsson applied to VR for a research project grant on *Computational Semantics for Degree Modifiers (CoSMo)* involving several members of the group. Unfortunately, the grants were not accepted but planning is underway for new applications. Loáiciga submitted an application on co-reference to RJ, and she is working on a proposal with Dobnik on visual co-reference to VR. Dobnik is working on a VR application on computational models of spatial language.
* Research visits to the group: (i) Andy Lücking, (b) Ielka van der Sluis, (c) Marco Baroni.
* *Group collaborations:* Dobnik and Ghanimifard are collaborating with John D. Kelleher at Dublin Institute of Technology in Ireland. New on-going collaborations which include work on publications and funding proposals have been initiated with all three academic visitors named in the previous point.
* *Popular science presentations promoting the group:* (i) Dobnik, Breitholtz, Ghanimifard and Adouane gave coordinated popular science talks at Vetenskaps-festivalen 2018, 22 April 2018, Gothenburg; (ii) Dobnik, Ghanimifard and Adouane presented popular science presentations at departmental open house (Öppet hus) on 15 March.

**Type Theory Group:**

The Type Theory group is devoted to the study of Type Theoretical methods for NLP and Formal Semantics. The group has decided not to meet regularly like the other groups. The main reason for this is that Type Theory is well-represented in the Dialogue, as well as in the Situated Language and Perception, and the newly formed Probabilistic Natural Language Semantics groups.

Instead, we are focusing on getting core researchers in Type Theory to talk to us about their work and to discuss theoretical and practical issues in Type Theoretical Semantics. In 2018, we had Professor Zhaohui Luo on a long visit, giving two talks on type theoretical semantics and also Bartosz Wieckowski on a short visit talking about issues of epistemic modality in intuitionistic logic and Type Theory. Staffan Larsson gave a course on Type Theory with Records and the following two courses are scheduled for ESSLLI2019:

1. Modelling linguistic communication using types, planned for ESSLLI 2019

(Cooper, Larsson)

1. From Montague Semantics to Modern Type Theories: A Meaningful Comparison.

Advanced Course in Language & Logic at ESSLLI 2019. Riga, Latvia. 2019. (Chatzikyriakidis, Luo)

On the publication front, the members of the group produced several papers, which are listed in the Publications Appendix.

**4 International Connections and Collaborations**

We are sustaining a rich network of international connections in our research activity. These connections include the following.

1. Stergios Chatzikyriakidis is continuing to work with Zhaohui Luo of Royal Holloway London on type theory.
2. Stergios Chatzikyriakidis, Kathrein Abu Kwaik, and Simon Dobnik are collaborating with Motaz Saad of the Islamic University of Gaza on Arabic dialects
3. Robin Cooper is continuing to work with Jonathan Ginzburg of the University of Paris 7 on Type Theory with Records.
4. Simon Dobnik and Mehdi Ghanimifard are working with John Kelleher of the Dublin Institute of Technology on the acquisition of spatial location terms.
5. Chris Howes, Ellen Breitholtz and Robin Cooper are cooperating with Mary Lavelle of King’s College London on a project focussed on dialogue reasoning with psychiatric patients.
6. Chris Howes is working with Pat Healey and other members of the Queen Mary University of London Cognitive Science Group and Arash Eshghi at Heriot-Watt University, Edinburgh, on dialogue research.
7. Chris Howes, Vlad Maraev, and Staffan Larsson work with Jonathan Ginzburg of the University of Paris 7 on the role of laughter and repairs in dialogue.
8. Shalom Lappin and Jean-Philippe Bernardy have been working with Jey Han Lau of IBM Melbourne and Ben Ambridge of the University of Liverpool on the influence of context on sentence acceptability.
9. Shalom Lappin is a Visiting Professor in the Queen Mary University of London Cognitive Science Group, and he is in discussion with Stephen Clark of Google DeepMind London on issues related to wide coverage parsing.
10. Sharid Loáiciga is cooperating with Luca Bevacqua and Hannah Rohde of the University of Edinburgh, and Christian Hardmeier of Uppsala University, on coreference in text.
11. Asad Sayeed is working with Xudong Hong, Vera Demberg, Bernt Schiele, and Rakshith Shetty of Saarland University on discourse coherence in visually grounded narrative.
12. Asad Sayeed is working with Yuval Marton of Morgan Stanley/University of Washington and Vera Demberg and Xudong Hong of Saarland University on large-scale semantic role corpora and neural thematic fit modeling.
13. Asad Sayeed is working with Vera Demberg at Saarland University on quantifier scope ambiguity modeling.

**5 Scientific Activities (Conferences, Workshops, Seminars, and Speakers)**

**Workshop on Dialogue and Perception**

The aim of this workshop was to initiate a genuine discussion between the areas of Dialogue and Percepetion, to examine different approaches from computational, linguistic and psychological perspectives, and to explore how these can inform each other. It featured invited talks by leading researchers in these areas, and high level contributed papers, presented as posters, selected through open competition and rigorous review. The webpage can be found at <https://clasp.gu.se/news-events/workshop-on-dialogue-and-perception-2018>

Proceedings are at <https://clasp.gu.se/news-events/workshop-on-dialogue-and-perception-2018/proceedings>

**Gothenburg-Stockholm workshop on Proof Theory, Model Theory and Probability in Natural Language**

An informal workshop comprising researchers from Gothenburg and Stockholm. The program can be found here: <https://clasp.gu.se/news-events/gothenburg-stockholm-workshop>

**The Second Swedish Symposium on Deep Learning**

CLASP, along with the Chalmers Area of Advanced Information and Communication Technology, organized SSDL2018, an event bringing together top researchers in Deep Learning across academia and industry. It involved thematic sessions on Vision, Natural Language Technologies, and Health Engineering, three of the highest impact areas for Deep Learning today. More information can be found here: <https://clasp.gu.se/news-events/the-second-swedish-symposium-on-deep-learning->

**Our Seminars, Visiting Speakers/Guest Researchers**

CLASP continues to be very active in conducting regular seminars in which members of CLASP, visiting speakers, and guest researchers present work related to CLASP’s scientific interests. CLASP was privileged to host a number of distinguished visiting speakers/guest researchers, both for short visits (2-4 days), and for longer visits (5-10 days). The range of topics covered by the seminars indicate CLASP’s broad research interests:

1. Dag Haug "Glue semantics for Universal dependencies" (joint work with Matthew Gotham)
2. Stephan Oepen "Holes in Meaning Construction with Minimal Recursion Semantics" (joint work with Dan Flickinger)
3. Sam Bowman "Two Early Efforts toward Using Deep Learning in Syntax and Semantics"
4. Sam Bowman "Sentence Understanding with Neural Networks and Natural Language Inference"
5. Richard Sproat "A computational model of the discovery of writing"
6. Richard Sproat "Induction of Finite-State Covering Grammars for Text Normalization (joint work with Kyle Gorman)"
7. Rasmus Blanck "A Compositional Bayesian Semantics for Natural Language"
8. Mehdi Ghanimifard "Spatial Knowledge In Neural Language Models"
9. Vlad Maraev "Towards KoS/TTR-based proof-theoretic dialogue management (joint work with: Jonathan Ginzburg (Université Paris Diderot), Staffan Larsson, Ye Tian (Amazon Research), Jean-Philippe Bernardy)"
10. Marco Baroni "Tabula nearly rasa: Probing the linguistic knowledge of character-level neural language models trained on unsegmented text (work in collaboration with Michael Hahn)"
11. Marco Baroni "Systematic compositionality in recurrent neural networks (and, if time allows, humans) (joint work with Brenden Lake, João Loula, Adam Liska, Germán Kruszewski, Tal Linzen)"
12. Bill Noble "Measuring linguistic style alignment: Social and psychological perspectives"
13. Patrick Blackburn "The clarification potential of instructions: Predicting clarification requests"
14. Ielka van der Sluis "The PAT project: Annotation and Evaluation of Pictures and Text"
15. Bartosz Wieckowski "Intuitionistic multi-agent subatomic natural deduction for belief and knowledge"
16. Devdatt Dubhashi, Mikael Kågebäck and Asad Sayeed "Learning (a language) to Communicate Efficiently"
17. Zhaohui Luo "Universes in MTT-semantics"
18. Zhaohui Luo "Dependent Event Types"
19. Andy Lücking "Turning context into meaning"
20. Riza Batista "Detecting semantic similarity between human-articulated statements and Quranic verses"

**6 PhD Program in Computational Linguistics**

We currently have 9 PhD students in CLASP. They are

1. Kathrein Abu-Kwaik (started November 2016, first supervisor Stergios Chatzikyriakidis, second supervisor Simon Dobnik)
2. Wafia Adouane (started September 2016, first supervisor Simon Dobnik, second supervisor Shalom Lappin)
3. Yuri Bizzoni (started September 2015, first supervisor Shalom Lappin, second supervisor Staffan Larsson)
4. Mehdi Ghanimifard (started September 2015, first supervisor Simon Dobnik, second supervisor Staffan Larsson)
5. Vladislav Maraev (started September 2017, first supervisor Chris Howes, second supervisor Staffan Larsson)
6. Sylvie Saget (started September, 2017, first supervisor Stergios Chatzikyriakidis, second supervisor Dominique Knutsen)
7. Bill Noble (started September 2018, first supervisor Staffan Larsson, second supervisor Asad Sayeed)
8. Adam Ek (starting March 2019, first supervisor Jean-Philippe Bernardy, second supervisor Stergios Chatzikyriakidis)
9. Vidya Somashekarappa (starting January 2019, first supervisor Asad Sayeed, second supervisor Chris Howes)

Our students are making excellent progress, with most of them presenting papers at major international conferences over the past year. Yuri Bizzoni will be the first CLASP student to graduate. His thesis defence is on February 21, 2019. He has just taken up a position as a postdoctoral researcher at the Saarland University. Mehdi Ghanimifard is expected to finish in June 2019. We will fill the remaining three PhD positions by early 2020.

**7 Budget**

We are attaching a provisional budget spread sheet that we received from the FLoV financial officer. It is based on current funding arrangements, with income and expenses to date. We are still waiting for a decision from the VR on an apparent budget surplus in PhD student funding. The provisional budget includes an expected increase of approximately 20% in building rental costs which we will incur when we move to the Humanities building in December 2019.

We are running a deficit in our travel budget due to a high rate of success and participation in major international conferences in the US, Australia, and Japan in 2018. This deficit is more than offset by surpluses in our conference, workshops, visiting researchers, and Advisory Scientific Board budgets. As the VR has authorised us to move funds among all of these budgets, our current situation is financially secure, based on the funding assumptions that were made for the attached spread sheet.

We will also achieve a significant savings in salary costs when Shalom Lappin moves from a 75% salary to 50% in January 2020. This move is conditioned by his decision to significantly reduce his commuting schedule between London and Gothenburg, which will entail a reduction in travel and housing expenses.

**8 Plans for 2019**

**The 13th International Conference on Computational Semantics (IWCS2019)**

CLASP is proud to host the 13th International Conference on Computational Semantics (IWCS 2019). The aim of the IWCS conference is to bring together researchers interested in all aspects of the computation, annotation, extraction, and representation of meaning in natural language, from either a lexical or structural semantic perspective. IWCS embraces both symbolic and machine learning approaches to computational semantics, and everything in between. We have received a record number of submissions for IWCS (more than a hundred). The webpage can be found here: <https://sites.google.com/view/iwcs2019/home>.

**Planned visits for 2019**

We have a couple of visits already planned. These include Heather Burnett, Massimo Poesio, Jey Han Lau, Oliver Bott, Annie Zaenen, Lauri Karttunen, and James Pustejovsky.

**Participation in International Conferences**

As in previous years, we are submitting papers to most of the major international conferences in NLP and computational linguistics (NAACL, ACL, COLING, IWCS), as well as journals (CL, JOLLI, LiLT). Several of our members are giving invited talks in high profile seminars abroad, and a number of us are teaching courses or organising workshops at summer schools, specifically ESSLLI and NASSLLI.

**9 Appendix: Publications and Talks**

**Wafia Adouane**

Refereed Conference papers:

Wafia Adouane, Simon Dobnik, Jean-Philippe Bernardy, Nasredine Semmar (2018), “A

Comparison of Character Neural Language Model and Bootstrapping for Language

Identification in Multilingual Noisy Texts”, *Proceedings of the Second Workshop on*

*Subword and Character Level Models in NLP* (SCLeM), June 6, 2018 New Orleans,

Louisiana, New Orleans, Louisiana USA.

Wafia Adouane, Jean-Philippe Bernardy, Simon Dobnik (2018), “Improving Neural Network

Performance by Injecting Background Knowledge: Detecting Code-switching and

Borrowing in Algerian Texts”, *Proceedings of the Third Workshop on Computational*

*Approaches to Linguistic Code-Switching*, collocated with ACL, Melbourne, Australia.

A presentation at Vetenskapsfestivalen 2018:

How to Teach a Machine to Speak

**Jean-Philippe Bernardy**

Reviewed Articles in Journals:

Jean-Philippe Bernardy (2018) “Can RNNs Learn Nested Recursion?”, *Linguistic Issues in Language Technology* 16.

Jean-Philippe Bernardy, Mathieu Boespflug, Ryan R. Newton, Simon Peyton Jones, Arnaud

Spiwack (2018), “Linear Haskell: Practical Linearity in a Higher-Order Polymorphic

Language”, *Proceedings of the ACM on Programming Languages* 2 (POPL 2018).

Papers in Refereed Conference Proceedings:

Vladislav Maraev, Jonathan Ginzburg, Staffan Larsson, Ye Tian, Jean-Philippe Bernardy

(2018), “Towards KoS/TTR-Based Proof-Theoretic Dialogue Management”, *Proceedings of*

*SemDial 2018 (AixDial)*, The 22nd Workshop on the Semantics and Pragmatics of Dialogue.

Jean-Philippe Bernardy, Rasmus Blanck, Stergios Chatzikyriakidis, and Shalom Lappin

(2018), “A Compositional Bayesian Semantics for Natural Language”, *Proceedings of the*

*First* *International Workshop on Language Cognition and Computational Models*, COLING

2018, Santa Fe, New Mexico, August 20, 2018, pp. 1-10.

Wafia Adouane, Jean-Philippe Bernardy, Simon Dobnik (2018), “Improving Neural Network

Performance by Injecting Background Knowledge: Detecting Code-switching and

Borrowing in Algerian Texts”, *Proceedings of the Third Workshop on Computational*

*Approaches to Linguistic Code-Switching*, collocated with ACL, Melbourne, Australia.

Jean-Philippe Bernardy, Shalom Lappin, and Jey Han Lau (2018), “The Influence of Context

on Sentence Acceptability Judgements”, *Proceedings of the 56th Annual Meeting of the*

*Association for Computational Linguistics* (Short Papers), Melbourne, Australia, July 2018,

pp. pages 1–6.

Wafia Adouane, Simon Dobnik, Jean-Philippe Bernardy, Nasredine Semmar (2018), “A

Comparison of Character Neural Language Model and Bootstrapping for Language

Identification in Multilingual Noisy Texts”, *Proceedings of the Second Workshop on*

*Subword and Character Level Models in NLP* (SCLeM), June 6, 2018 New Orleans,

Louisiana, NewOrleans, Louisiana USA.

Graduate Course Taught:

Functional Representation of Deep Learning models

**Yuri Bizzoni**

Papers in Refereed Conference Proceedings:

Yuri Bizzoni and Shalom Lappin (2018), “Predicting Human Metaphor Paraphrase Judgments

with Deep Neural Networks”, *Proceedings of the NAACL 2018 Workshop on Figurative*

*Language Processing*, New Orleans LA, June 2018, pp. 45-55.

Yuri Bizzoni and Mehdi Ghanimifard (2018), “Bigrams and BiLSTMs Two neural networks

for sequential metaphor detection”, *Proceedings of the NAACL 2018 Workshop on*

*Figurative Language Processing*, New Orleans LA, June 2018.

ArXive Paper:

Yuri Bizzoni and Shalom Lappin (2018), The Effect of Context on Metaphor Paraphrase

Aptness Judgments, arXiv:1809.01060 [cs.CL], https://arxiv.org/abs/1809.01060.

**Rasmus Blanck**

Papers in Refereed Conference Proceedings:

Rasmus Blanck and Aleksandre Maskharashvili (2018), “From TAG to HOL Representations

of AMRs via ACGs”, *Proceedings of the Symposium on Logic and Algorithms in*

*Computational Linguistics* 2018, Stockholm, 28–31 August 2018, Krasimir Angelov,

Kristina Liefke, Roussanka Loukanova, Michael Moortgat, Satoshi Tojo (eds.), Stockholm

University, DiVA portal for digital publications.

Jean-Philippe Bernardy, Rasmus Blanck, Stergios Chatzikyriakidis, and Shalom Lappin

(2018), “A Compositional Bayesian Semantics for Natural Language”, *Proceedings of the*

*First* *International Workshop on Language Cognition and Computational Models*, COLING

2018, Santa Fe, New Mexico, August 20, 2018, pp. 1-10.

**Ellen Breitholtz**

Papers in Refereed Conference Proceedings:

Ellen Breitholtz and Robin Cooper (2018a), “Relating Coordination in Non-Linguistic Games

and Dialogue Games, *Proceedings of the Workshop on Dialogue and Perception*, University

of Gothenburg, June 2018, pages 17–21

Ellen Breitholtz and Robin Cooper (2018b), “Towards a Game Theory for Conversational

Rhetoric, P*roceedings of Sociolinguistic, Psycholinguistic and Formal Perspectives on*

*Meaning,* Paris.

Ellen Breitholtz and Robin Cooper (2018c), “How to Play Games with Types, *Proceedings of*

*the Symposium on Logic and Algorithms in Computational Linguistics 2018*, University of

Stockholm, August 2018.

Edited Volume:

Ellen Breitholz, Christine Howes, and Simon Dobnik (2018), Editors, *Proceedings of the*

*Workshop on Dialogue and Perception*, University of Gothenburg, June 2018.

Research Projects:

Dialogical Reasoning in Patients with Schizophrenia (Riksbankens jubileumsfond, P16-0805:1)

– Duration: 2017–2020

– PI Ellen Breitholtz

– CIs Dr Christine Howes, University of Gothenburg, Dr Mary Lavelle, King’s

College, London, Professor Robin Cooper, University of Gothenburg.

– Research grant: SEK 3.786 000

IncReD - Incremental Reasoning in Dialogue (Swedish Research Council project

2016-)

– Duration: 2017-2020

– PI Christine Howes

– CI Ellen Breitholz

– Research grant: SEK 3.600 000

**Stergios Chatzikyriakidis**

Papers in Reviewed Journals and Collections:

Stergios Chatzikyriakidis and Robin Cooper (2018), “Type Theory for Natural Language

Semantics”, in *Oxford Research Encyclopedia of Linguistics*, DOI:

10.1093/acrefore/9780199384655.013.329

Stergios Chatzikyriakidis and Zhaohui Luo, 2018. Identity Criteria of Common Nouns and Dot-types for Copredication. Oslo Studies in Language.

Papers in Refereed Conference Proceedings:

Stergios Chatzikyriakidis, Robin Cooper, Simon Dobnik and Staffan Larsson (2017), “An

Overview of Natural Language Inference Data Collection: The Way Forward?”, extended

abstract, *Proceedings of the Workshop on Computing Natural Language Inference*,

International Conference on Computational Semantics, Toulouse, 2017.

Kathrein Abu Kwaik, Motaz Saad, Stergios Chatzikyriakidis, and Simon Dobnik (2018), “A

Lexical Distance Study of Arabic Dialects”, *Proceedings of the 4th International*

*Conference on Arabic Computational Linguistics* (ACLing 2018), pages 1–12, Dubai,

United Arab Emirates, November 17–19, 2018.

Kathrein Abu Kwaik, Motaz Saad, Stergios Chatzikyriakidis, and Simon Dobnik (2018),

“Shami: A Corpus of Levantine Arabic Dialects”, *Proceedings of LREC 2018*, 11th

International Conference on Language Resources and Evaluation, pages 1–8, Phoenix

Seagaia Conference Center, Miyazaki, Japan, May, 7–12 2018, European Language

Resources Association (ELRA).

Jean-Philippe Bernardy, Rasmus Blanck, Stergios Chatzikyriakidis, and Shalom Lappin

(2018), “A Compositional Bayesian Semantics for Natural Language”, *Proceedings of the*

*First* *International Workshop on Language Cognition and Computational Models*, COLING

2018, Santa Fe, New Mexico, August 20, 2018, pp. 1-10.

T. Xue, Z. Luo and S. Chatzikyriakidis (2018b), “Propositional Forms of Judgemental

Interpretations”, *Proceedings of NLCS18* (affiliated with FLoC), Oxford. 2018.

Papers in arXiv:

Aarne Talman, and Stergios Chatzikyriakidis, (2018), Neural Network Models for Natural

Language Inference Fail to Capture the Semantics of Inference, arXiv.

Invited talks:

Stergios Chatzikyriakidis. Formal Semantics in MTTs: Playing around with the Coq Proof Assistant. Invited tutorial at NASSLLI 2018.

Stergios Chatzikyriakidis.Formal Semantics in Modern Type Theories. Invited talk at NASSLLI 2018.

Stergios Chatzikyriakidis. A fragment answer inspired view of afterthoughts: gender mismatches in Greek. Talk given at the Linguistics Circle, University of Edinburgh, March 2018.

**Robin Cooper**

Publications for Robin Cooper listed here include items from 2017 that appeared too late to be added to last year's report.

Papers in Reviewed Journals and Collections:

Simon Dobnik and Robin Cooper (2017), “Interfacing Language, Spatial Perception and

Cognition in Type Theory with Records”, *Journal of Language Modelling*, Vol. 5 No. 2,

pp. 272--301.

Robin Cooper (2017), “Judgement, Taste and Closely Related Germanic Languages”, in *The*

*Very Model of a Modern Linguist - in Honor of Helge Dyvik*, ed. by Victoria Rosén and

Koenraad De Smedt, Bergen Language and Linguistic Studies, Vol. 8, ISSN:

1892-2449, DOI: http://dx.doi.org/10.15845/bells.v8i1, pp. 19-32.

Stergios Chatzikyriakidis and Robin Cooper (2018), “Type Theory for Natural Language

Semantics”, in *Oxford Research Encyclopedia of Linguistics*, DOI:

10.1093/acrefore/9780199384655.013.329

Papers in Refereed Conference Proceedings:

Stergios Chatzikyriakidis, Robin Cooper, Simon Dobnik and Staffan Larsson (2017), “An

Overview of Natural Language Inference Data Collection: The Way Forward?”, extended

abstract, *Proceedings of the Workshop on Computing Natural Language Inference*,

International Conference on Computational Semantics, Toulouse, 2017.

Ellen Breitholtz, Christine Howes and Robin Cooper (2017), “Incrementality All the

Way Up”, extended abstract, *Proceedings of the Workshop on Computing Natural Language*

*Inference*, International Conference on Computational Semantics, Toulouse, 2017.

Robin Cooper (2017), “Neural TTR and Possibilities for Learning”, Simon Dobnik and

Shalom Lappin eds., *CLASP Papers in Computational Linguistics: Proceedings of the*

*Conference on Logic and Machine Learning in Natural Language* (LaML 2017),

Gothenburg, 12--13 June, vol. 1 of CLASP Papers in Computational Linguistics,

Department of Philosophy, Linguistics and Theory of Science, CLASP, University of

Gothenburg.

Jonathan Ginzburg, Robin Cooper, Julian Hough and David Schlangen (2018),

“Incrementality and Clarification/Sluicing Potential”, *Proceedings of Sinn und Bedeutung*

*21*, ed. by Robert Truswell, Chris Cummins, Caroline Heycock, Brian Rabern and Hannah

Rohde, semanticsarchive.net, Linguistic Society of America, pp. 463--480,

<https://semanticsarchive.net/Archive/DRjNjViN/GinzburgCooperHoughSchlangen.pdf>.

Robin Cooper and Staffan Larsson (2018), “Dynamic Syntax in Type Theory with Records”,

*Proceedings of The Second Dynamic Syntax Conference*, University of Edinburgh, April 17-

18, 2018.

Ellen Breitholtz and Robin Cooper (2018), “Relating Coordination in Non-Linguistic Games

and Dialogue Games, *Proceedings of the Workshop on Dialogue and Perception*, University

of Gothenburg, June 2018, pages 17–21

Invited Talks:

Attitudes in TTR, Workshop on records, frames and attribute structures, Berlin, 13th-14th March, 2018

How to Play Games with Types (joint work with Ellen Breitholtz), Symposium on Logic and Algorithms in Computational Linguistics, Stockholm, 28th-29th August, 2018

Edited Issue of a Journal:

Robin Cooper and Christian Retoré (eds) (2017) Special issue on type-theoretical approaches

to lexical semantics, *Journal of Language Modelling*, Vol. 5

No. 2.

Other International Talks:

Robin Cooper and Staffan Larsson, Dynamic Syntax in Type Theory with Records, Conference on Dynamic Syntax, Edinburgh 17th-18th April, 2018.

Ellen Breitholtz and Robin Cooper Towards a conversational game theory, Workshop on Sociolinguistic, Psycholinguistic and Formal Perspectives on Meaning, Paris, 2nd-3rd July, 2018.

**Simon Dobnik**

Papers in Refereed Conference Proceedings:

Simon Dobnik and Sharid Loáiciga (2018), “On Visual Coreference Chains Resolution”,

Extended abstracts of the *Seventh Swedish Language Technology Conference* (SLTC-2018),

pages 1–4, Stockholm, Sweden, November 7–9, 2018.

Simon Dobnik and John D. Kelleher (2018), “Modular Mechanistic Networks for

Computational Modelling of Spatial Descriptions”, H. Dalianis and M. Wirén (editors),

*Extended abstracts of the* *Seventh Swedish Language Technology Conference* (SLTC-2018),

pages 1–3, Stockholm, Sweden, November 7–9, 2018.

Mehdi Ghanimifard and Simon Dobnik (2018), “Language Model Perplexities as Multi-Word

Distributional Vectors of Spatial Relations”, *Extended abstracts of the Seventh Swedish*

*Language Technology Conference* (SLTC-2018), pages 102–106, Stockholm, Sweden,

November 7–9, 2018.

Simon Dobnik and Axel Storckenfeldt (2018), “Categorisation of Conversational Games in

Free Dialogue over Spatial Scenes”, B. Favre, M. Ochs, and L. Prévot (editors),

*Proceedings of AixDial – Semdial 2018*, The 22st Workshop on the Semantics and

Pragmatics of Dialogue, pp. 1–2, Aix-en-Provence, France, November 8–10, 2018.

Mehdi Ghanimifard and Simon Dobnik (2018), “Knowing When to Look for What and

Where: Evaluating Generation of Spatial Descriptions with Adaptive Attention”, R.

Bernardi, R. Fernandez, S. Gella, K. Kafle, S. Lee, D. Batra, and M. Nabi (editors),

*Proceedings of the Workshop on Shortcomings in Vision and Language* (SiVL), European

Conference on Computer Vision (ECCV-2018), pages 1–10, Munich, Germany, September

8, 2018.

Mehdi Ghanimifard and Simon Dobnik (2018) “Visual Grounding of Spatial Relations in

Recurrent Neural Language Models, T. Thrash, S. Dobnik, and J. D. Kelleher (editors),

*Proceedings of the 3rd Workshop on Models and Representations in Spatial Cognition*

(MRSC-3), 11th International Conference on Spatial Cognition 2018, pages 1–7, Tübingen,

Germany, September 5, 2018. https://dobnik.net/simon/events/mrsc-3/#programme.

Kathrein Abu Kwaik, Motaz Saad, Stergios Chatzikyriakidis, and Simon Dobnik (2018), “A

Lexical Distance Study of Arabic Dialects”, *Proceedings of the 4th International*

*Conference on Arabic Computational Linguistics* (ACLing 2018), pages 1–12, Dubai,

United Arab Emirates, November 17–19, 2018.

Wafia Adouane, Jean-Philippe Bernardy, Simon Dobnik (2018), “Improving Neural Network

Performance by Injecting Background Knowledge: Detecting Code-switching and

Borrowing in Algerian Texts”, *Proceedings of the Third Workshop on Computational*

*Approaches to Linguistic Code-Switching*, collocated with ACL, Melbourne, Australia.

Wafia Adouane, Simon Dobnik, Jean-Philippe Bernardy, Nasredine Semmar (2018), “A

Comparison of Character Neural Language Model and Bootstrapping for Language

Identification in Multilingual Noisy Texts”, *Proceedings of the Second Workshop on*

*Subword and Character Level Models in NLP* (SCLeM), June 6, 2018 New Orleans,

Louisiana, New Orleans, Louisiana USA.

Simon Dobnik, Mehdi Ghanimifard, and John D. Kelleher (2018), “Exploring the Functional

and Geometric Bias of Spatial Relations Using Neural Language Models”, *Proceedings of*

*the First International Workshop on Spatial Language Understanding* (SpLU 2018) at

NAACL-HLT 2018, pages 1–11, New Orleans, Louisiana, USA, June 6, 2018. Association

for Computational Linguistics.

Kathrein Abu Kwaik, Motaz Saad, Stergios Chatzikyriakidis, and Simon Dobnik (2018),

“Shami: A Corpus of Levantine Arabic Dialects”, *Proceedings of LREC 2018*, 11th

International Conference on Language Resources and Evaluation, pages 1–8, Phoenix

Seagaia Conference Center, Miyazaki, Japan, May, 7–12 2018, European Language

Resources Association (ELRA).

S. Dobnik and J. D. Kelleher (2018), “Probabilistic Priming for Situated Interaction”, H.

Zeevat, P. Sutton, and V. Tsouni (editors), *Abstracts of DGfS 2018: 40th Annual Conference*

*Of the German Linguistic Society*, AG 16 Applications of probability theory in linguistics,

page 1, Stuttgart, Germany, 7–9 March, 2018, University of Stuttgart.

Edited Conference Proceedings:

Tyler Thrash, Simon Dobnik, and John D. Kelleher (editors) (2018), *Proceedings of the 3rd*

*Workshop on Models and Representations in Spatial Cognition* (MRSC-3), 11th

International Conference on Spatial Cognition 2018.

<https://dobnik.net/simon/events/mrsc-3/#programme>, Tübingen, Germany.

Christine Howes, Simon Dobnik, and Ellen Breitholtz (editors) (2018), *Proceedings of the*

*Workshop on Dialogue and Perception* (DaP-2018), CLASP, University of Gothenburg,

Sweden.

Simon Dobnik and Shalom Lappin (editors), (2017), *CLASP Papers in Computational*

*Linguistics: Proceedings of the Conference on Logic and Machine Learning in Natural*

*Language* (LaML 2017), Gothenburg, 12 –13 June, volume 1. Department of Philosophy,

Linguistics and Theory of Science (FLOV), University of Gothenburg. CLASP, Centre for

Language and Studies in Probability, Gothenburg, Sweden.

Invited Talks:

Simon Dobnik (2019), About friendly computers that understand and learn from us (O prijaznih računalnikih, ki nas razumejo in se od nas učijo). Invited talk at KAZU, Koroška akademija znanosti in umetnosti (Carinthian academy of science and art), 4 January 2019, Slovenj Gradec, Slovenia.

Simon Dobnik (2018), Language, action, and perception. Keynote talk at the Workshop on Annotation, Recognition and Evaluation of Actions (AREA) at LREC2018, 7 May, Phoenix Seagaia Conference Center, Miyazaki, Japan. European Language Resources Association (ELRA).

Popular Science Talks:

Simon Dobnik (2018), Humans and machines in interaction. Vetenskapsfestivalen 2018. 22 April, Nordstan, Gothenburg.

Simon Dobnik. 2018. Humans and machines in interaction. Presentation and a workshop on language technology with student projects. Öppethus, Department of Philosophy, Linguistics and Theory of Science, 15 March, Gothenburg.

Workshop/Conference Organisation:

Local organiser (with Stergios Chatzikyriakidis) and programme co-chair (with Stergios Chatzikyriakidis and Vera Demberg) of the 13th International Conference on Computational Semantics (IWCS 2019), 23–27 May, Gothenburg, Sweden.

Co-organiser and programme co-chair (with Tyler Thrash and John D. Kelleher) of the 3rd Workshop on Models and Representations in Spatial Cognition (MRSC-3), Tu ̈bingen, Germany, 5 September 2018, collocated with Spatial Cognition 2018.

Co-organiser and programme co-chair (with Christine Howes and Ellen Breitholtz) of the CLASP Dialogue and Perception Workshop, 14-15 June, Wallenberg conference centre, University of Gothenburg.

Research Activities:

- Leader of the Language and Perception research group within CLASP:

\* PhD supervision

\* Organising Language and Perception (L&P) reading group

\* Teaching PhD courses: (i) Representations of Meaning (ROM), (ii) Language, Action,

and Perception (APL), (iii) Sociolinguistics and bilinguilism for natural language

processing (in collaboartion with Sally Boyd)

\* new collaborations with invited guest researchers

\* Dialogue and Perception Workshop (DAP), 14-15 June 2018, Wallenberg conference

centre, University of Gothenburg

- Grant applications to VR and Wallenberg

**Mehdi Ghanimifard**

Papers in Refereed Conference Proceedings:

Simon Dobnik, Mehdi Ghanimifard, and John D. Kelleher (2018), “Exploring the Functional

and Geometric Bias of Spatial Relations Using Neural Language Models”, *Proceedings of*

*the First International Workshop on Spatial Language Understanding* (SpLU 2018) at

NAACL-HLT 2018, pages 1–11, New Orleans, Louisiana, USA, June 6, 2018. Association

for Computational Linguistics.

Mehdi Ghanimifard and Simon Dobnik (2018), “Knowing When to Look for What and

Where: Evaluating Generation of Spatial Descriptions with Adaptive Attention”, R.

Bernardi, R. Fernandez, S. Gella, K. Kafle, S. Lee, D. Batra, and M. Nabi (editors),

*Proceedings of the Workshop on Shortcomings in Vision and Language* (SiVL), European

Conference on Computer Vision (ECCV-2018), pages 1–10, Munich, Germany, September

8, 2018.

Yuri Bizzoni and Mehdi Ghanimifard (2018), “Bigrams and BiLSTMs Two neural networks

for sequential metaphor detection”, *Proceedings of the NAACL 2018 Workshop on*

*Figurative Language Processing*, New Orleans LA, June 2018.

Mehdi Ghanimifard and Simon Dobnik (2018), “Language Model Perplexities as Multi-Word

Distributional Vectors of Spatial Relations”, *Extended abstracts of the Seventh Swedish*

*Language Technology Conference* (SLTC-2018), pages 102–106, Stockholm, Sweden,

November 7–9, 2018.

Mehdi Ghanimifard and Simon Dobnik (2018) “Visual Grounding of Spatial Relations in

Recurrent Neural Language Models, T. Thrash, S. Dobnik, and J. D. Kelleher (editors),

*Proceedings of the 3rd Workshop on Models and Representations in Spatial Cognition*

(MRSC-3), 11th International Conference on Spatial Cognition 2018, pages 1–7, Tübingen,

Germany, September 5, 2018. https://dobnik.net/simon/events/mrsc-3/#programme.

Invited talk:

Mehdi Ghanimifard, "Grounded Neural Language Models for Spatial Language: Presenting an Overview of Research on Processing Spatial Language”, NLP group at the University of Melbourne, July 13, 2018.

**Christine Howes**

On parental leave for 6 months in 2018, from April 1st -- September 30th.

Journal Articles:

Patrick G.T.Healey, Gregory J. Mills, Arash Eshghi, and Christine Howes (2018), “Running

Repairs: Coordinating Meaning in Dialogue”, *TopiCS in Cognitive Science* 10, pp. 367–388

ISSN 1756-8765.

Matthew Purver, Julian Hough, and Christine Howes (2018), “Computational Models of

Miscommunication Phenomena”, *TopiCS in Cognitive Science*, ISSN 1756-8765.

Papers in Refereed Conference Proceedings:

Mary Lavelle, Christine Howes, Patrick G.T. Healey, and Rosemarie McCabe (2018), “Are

We Having a Laugh? Conversational Laughter in Schizophrenia”, *Proceedings of the*

*Workshop on Dialogue and Perception*, CLASP, University of Gothenburg, June 2018, pp.

35–37.

Vladislav Maraev and Christine Howes (2018), “Towards an Annotation Scheme for Causes

of Laughter in Dialogue”, *Proceedings of the International Workshop on Spoken Dialog*

*System* *Technology*, Singapore, May 14-16, 2018.

#### Vladislav Maraev, Chiara Mazzocconi, Christine Howes, and Jonathan Ginzburg (2018),

#### “Integrating Laughter into Spoken Dialogue Systems: Preliminary Analysis and Suggested

#### Programme”, Proceedings of the FAIM/ISCA Workshop on Artificial Intelligence for

#### Multimodal Human Robot Interaction, Stolckholm, July 2018, pages 9–14.

Vladislav Maraev, Chiara Mazzocconi, Christine Howes, and Jonathan Ginzburg (2018),

“Analysis of Laughables: A Preliminary Perception Study, *Proceedings of the Workshop on*

*Dialogue and Perception*, CLASP, University of Gothenburg, June 2018, pages 43–47.

Chapters in Collections:

L. Lavia, H.J. Witchel, F. Aletta, J. Steffens, A. Fiebig, J. Kang, C. Howes, and P.G.T. Healey

(2018), “Non-participant Observation Methods for Soundscape Design and Urban Planning,

*Handbook of Research on Perception-Driven Approaches to Urban Assessment and Design*,

edited by F. Aletta & J. Xiao, 73–99, IGI Global, ISBN 978-1-52253-637-6.

Edited Conference Proceedings:

Christine Howes, Simon Dobnik, and Ellen Breitholtz (editors) (2018), *Proceedings of the workshop on Dialogue and Perception*, CLASP, University of Gothenburg, June 2018.

Externally financed research projects, project leader

• VR (Swedish Research Council) Project grant 2016-01162 Incremental Reasoning in

Dialogue

PI Christine Howes

CIs Ellen Breitholtz, Robin Cooper

Project details: www.christinehowes.com/incred

• Riksbankens jubileumsfond, P16-0805:1 Dialogical Reasoning in Patients with

Schizophrenia

PI Ellen Breitholtz

CIs Christine Howes, Mary Lavelle, Robin Cooper

Project details: www.christinehowes.com/drips

3,600,000 SEK

2017-2020

3,786,000 SEK

2017-2020

Other tasks in connection with research at university, faculty or department level

• Leader of Dialogue Research Group CLASP, GU From 2018

– Running the Dialogue reading group

– Managing the Gothenburg Spoken Language Corpus (https://data.flov.gu.se/gslc/)

Conference Organisation:

Dialogue and Perception (CLASP workshop) Gothenburg, Sweden, June 2018

Programme co-chair

**Shalom Lappin**

Papers in Refereed Conference Proceedings:

Shalom Lappin (2018), “Towards a Computationally Viable Framework for Semantic

Representation”, *Proceedings of the Symposium on Logic and Algorithms in Computational*

*Linguistics 2018*, September 2018, Stockholm University, DiVA Portal for digital

publications, pp. 47-63.

Jean-Philippe Bernardy, Rasmus Blanck, Stergios Chatzikyriakidis, and Shalom Lappin

(2018), “A Compositional Bayesian Semantics for Natural Language”, *Proceedings of the*

*First* *International Workshop on Language Cognition and Computational Models*, COLING

2018, Santa Fe, New Mexico, August 20, 2018, pp. 1-10.

Jean-Philippe Bernardy, Shalom Lappin, and Jey Han Lau (2018), “The Influence of Context

on Sentence Acceptability Judgements”, *Proceedings of the 56th Annual Meeting of the*

*Association for Computational Linguistics* (Short Papers), pages 1–6, Melbourne, Australia,

July 2018.

Yuri Bizzoni and Shalom Lappin (2018), “Predicting Human Metaphor Paraphrase Judgments

with Deep Neural Networks”, *Proceedings of the NAACL 2018 Workshop on Figurative*

*Language Processing*, New Orleans LA, June 2018, pp. 45-55.

ArXive Paper:

Yuri Bizzoni and Shalom Lappin (2018), The Effect of Context on Metaphor Paraphrase

Aptness Judgments, arXiv:1809.01060 [cs.CL], https://arxiv.org/abs/1809.01060.

Scientific Blog Post:

Shalom Lappin and Jey Han Lau (2018), “Gradient Probabilistic Models vs Categorical

Grammars: A Reply to Sprouse et al. (2018)”, *The Science of Language* (blog), July 2018,

<http://thescienceoflanguage.com/2018/07/22/gradient-probabilistic-models-vs-categorical->

grammars-a-reply-to-sprouse-et-al-2018/.

Invited Lecture:

Modelling the Influence of Document Context on Human Acceptability Judgements, SFB Distinguished Speakers in Language Science, the joint Colloquium of the Department of Language Science & Technology and SFB 1102, University of Saarland, Saarbrücken, May 24, 2018.

Edited Conference Proceedings:

Simon Dobnik and Shalom Lappin (editors), (2017), *CLASP Papers in Computational*

*Linguistics: Proceedings of the Conference on Logic and Machine Learning in Natural*

*Language* (LaML 2017), Gothenburg, 12 –13 June, volume 1. Department of Philosophy,

Linguistics and Theory of Science (FLOV), University of Gothenburg. CLASP, Centre for

Language and Studies in Probability, Gothenburg, Sweden.

**Staffan Larsson**

Papers in Refereed Conference Proceedings:

Robin Cooper and Staffan Larsson (2018), “Dynamic Syntax in Type Theory with Records”,

*Proceedings of The Second Dynamic Syntax Conference*, University of Edinburgh, April 17-

18, 2018.

Staffan Larsson (2018), “Perceptual Semantics and Dialogue Processing”, Christine Howes,

Simon Dobnik and Ellen Breitholtz (editors), *Proceedings of the Workshop on Dialogue and*

*Perception*, CLASP, University of Gothenburg, June 2018.

Vladislav Maraev, Jonathan Ginzburg, Staffan Larsson, Ye Tian, Jean-Philippe Bernardy

(2018), “Towards KoS/TTR-Based Proof-Theoretic Dialogue Management”, *Proceedings of*

*SemDial 2018 (AixDial): The 22nd Workshop on the Semantics and Pragmatics of Dialogue*,

Aix-en-Provence, 8-10 November 2018 / Laurent Prévot, Magalie Ochs and Benoît Favre

(eds.).

Journal Article:

Staffan Larsson (2018), “Grounding as a Side-Effect of Grounding”, *Topics in Cognitive*

*Science,* Vol 10 Issue 2.

**Sharid Loáiciga**

Papers in Refereered Conference Proceedings:

Sharid Loáiciga, Luca Bevacqua, Hannah Rohde, and Christian Hardmeier (2018), “Event

Versus Entity Co-reference: Effects of Context and Form of Referring Expression”,

*Proceedings of the First Workshop on Computational Models of Reference, Anaphora, and*

*Coreference* (CRAC), NAACL, June 2018, New Orleans, LA.

Christian Hardmeier, Luca Bevacqua, Sharid Loáiciga, and Hannah Rohde (2018), “Forms of

Anaphoric Reference to Organisational Named Entities: Hoping to Widen Appeal, They

Diversified”, *Proceedings of the Seventh Named Entities Workshop* (NEWS18), ACL, July

2018, Melbourne, Australia.

Liane Guillou, Christian Hardmeier, Ekaterina Lapshinova-Koltunski, and Sharid Loáiciga

(2018), “A Pronoun Test Suite Evaluation of the English–German MT Systems at WMT

2018”, *Proceedings of the Third Conference on Machine Translation*, WMT18, Brussels,

Belgium. Association for Computational Linguistics.

Poster Presentations without Proceedings:

Simon Dobnik and Sharid Loáiciga. (2018), “On Visual Coreference Chains Resolution”,

SLTC 2018, Stockholm University, Sweden, 8-9 November.

Liane Guillou, Christian Hardmeier, Ekaterina Lapshinova-Koltunski, and Sharid Loáiciga

(2018), “A Pronoun Test Suite Evaluation of the English–German MT Systems at WMT

2018”, SLTC 2018, Stockholm University, Sweden. 8-9 November.

Anita Ramm, Sharid Loáiciga, Annemarie Friedrich, and Alexander Fraser (2018), “Annotating

Tense, Mood and Voice for English, French and German”, DGfS: 40th Annual Conference

of the German Linguistic Society, University of Stuttgart, Germany, 07-09 March 2018.

CLASP Related Activity:

Attended the Swedish Symposium on Deep Learning, 5-6 September 2018.

**Vladislav Maraev**

Papers in Refereed Conference Proceedings:

Vladislav Maraev, Jonathan Ginzburg, Staffan Larsson, Ye Tian, Jean-Philippe Bernardy

(2018), “Towards KoS/TTR-Based Proof-Theoretic Dialogue Management”, *Proceedings of*

*SemDial 2018 (AixDial): The 22nd Workshop on the Semantics and Pragmatics of Dialogue*,

Aix-en-Provence, 8-10 November 2018, Laurent Prévot, Magalie Ochs and Benoît Favre

(eds).

Vladislav Maraev and Christine Howes (2018), “Towards an Annotation Scheme for Causes

of Laughter in Dialogue”, *Proceedings of the International Workshop on Spoken Dialog*

*System Technology*, Singapore, May 14-16, 2018.

#### Vladislav Maraev, Chiara Mazzocconi, Christine Howes, and Jonathan Ginzburg (2018),

#### “Integrating Laughter into Spoken Dialogue Systems: Preliminary Analysis and Suggested

#### Programme”, Proceedings of the FAIM/ISCA Workshop on Artificial Intelligence for

#### Multimodal Human Robot Interaction, Stolckholm, July 2018, pages 9–14.

Vladislav Maraev, Chiara Mazzocconi, Christine Howes, and Jonathan Ginzburg (2018),

“Analysis of Laughables: A Preliminary Perception Study, *Proceedings of the Workshop on*

*Dialogue and Perception*, CLASP, University of Gothenburg, June 2018, pages 43–47.

Chiara Mazzocconi, Vladislav Maraev, and Jonathan Ginzburg (2018a), “Clarifying

Laughter”, *Proceedings of Laughter Workshop 2018*, Sorbonne, Paris, September 2018, pp.

16–20.

Chiara Mazzocconi, Vladislav Maraev, and Jonathan Ginzburg (2018b), “Laughter Repair”

*Proceedings of SemDial 2018* *(AixDial)*: *The 22nd Workshop on the Semantics and*

*Pragmatics of Dialogue*, Aix-en-Provence, 8-10 November 2018, Laurent Prévot, Magalie

Ochs and Benoît Favre (eds), pp. 16–25.

Talks:

News Aggregator as a Tool for (Black) Humor Generation, July 27, 2018, 30th ISHS Conference 2018, Tallinn, Estonia, joint work with Ilya Utekhin (European University at Saint Petersburg).

What makes (conversational) agents laugh, July 15, 2018, 18th International Summer School and Symposium on Humour and Laughter (2018), University of Wolverhampton, England.

Laughter in dialogues with humans and machines, Dec 19, 2018, Conference on Text Interpretation (2018), Tyumen, Russia.

**Aleksandre Maskharashvili**

Paper in Referred Conference Proceedings:

Rasmus Blanck and Aleksandre Maskharashvili (2018), “From TAG to HOL Representations

of AMRs via ACGs”, *Proceedings of the Symposium on Logic and Algorithms in*

*Computational Linguistics* 2018, Stockholm, 28–31 August 2018, Krasimir Angelov,

Kristina Liefke, Roussanka Loukanova, Michael Moortgat, Satoshi Tojo (eds.), Stockholm

University, DiVA portal for digital publications.

**Bill Noble**

Poster in Refereed Conference Proceedings:

Bill Noble (2018, “Does semantic negotiation predict semantic change?”, poster presentation

at the 2018 Workshop on the Semantics and Pragmatics of Dialogue (AixDial), The 22nd

Workshop on the Semantics and Pragmatics of Dialogue, Aix-en-Provence, 8-10, November

9, 2018.

CLASP Seminar Talk:

Measuring linguistic style alignment: Social and psychological perspectives

CLASP semina, Oct. 31, 2018.

**Chatrine Qwaider**

Paper in Refereed Conference Proceedings:

Kathrein Abu Kwaik, Motaz Saad, Stergios Chatzikyriakidis, and Simon Dobnik (2018),

“Shami: A Corpus of Levantine Arabic Dialects”, *Proceedings of LREC 2018*, 11th

International Conference on Language Resources and Evaluation, pages 1–8, Phoenix

Seagaia Conference Center, Miyazaki, Japan, May, 7–12 2018, European Language

Resources Association (ELRA).

Kathrein Abu Kwaik, Motaz Saad, Stergios Chatzikyriakidis, and Simon Dobnik (2018), “A

Lexical Distance Study of Arabic Dialects”, *Proceedings of the 4th International Conference*

*on Arabic Computational Linguistics* (ACLing 2018), Elsevier, Dubai, United Arab

Emirates, November 17–19, 2018, pp. 1-12.

**Sylvie Saget**

Papers in Refereed Conference Proceedings

Sylvie Saget (2018), L”anguage as a Tool: Acceptance-Based Pragmatics”, *Poznań*

*Reasoning Week - Logic and Cognition*, 11–15 September 2018, Poznań , Poland.

Sylvie Saget (2018), “Language as a Tool: Acceptance-Based Pragmatics”, *Workshop on Next*

*Generation Human-Agent Interaction (NGHAI)*, 6th annual International Conference on

Human-Agent Interaction (HAI 2018), Southampton, UK, 15-18th December 2018.

Talks:

Cooperative Speaker Revisited, CLASP Seminar, March 27, 2018.

Common Ground: a Non-Summative view, Presentation at Swedish Dialogue Workshop (Dialogverkstad), Linköping, May 28, 2018.

Mentoring:

Mentor of an Erasmus research intern at FLoV and CLASP - Ronja Utescher (MA in computational linguistics), May-Oct 2018.

**Asad Sayeed**

Papers in Refereed Conference Proceedings:

Xudong Hong, Asad Sayeed, and Vera Demberg (2018), “Learning Distributed Event

Representations with a Multi-Task Approach”, *Proceedings of the Seventh Joint Conference*

*on Lexical and Computational Semantics*, New Orleans, June 5-6, 2018, Association for

Computational Linguistics, 2018.

Asad Sayeed, Pavel Shkadzko, and Vera Demberg (2018), “Rollenwechsel-English: a Large-

Scale Semantic Role Corpus”, *LREC 2018, Eleventh International Conference on Language*

*Resources and Evaluation*, May 7-12, 2018, Miyazaki, Japan, Paris, France, European

Language Resources Association, 2018.

Mikael Kagebåck, Devdatt Dubhashi, and Asad Sayeed (2018), “DeepColor: Reinforcement

Learning Optimizes Information Efficiency and Well-Formedness in Color Name

Partitioning”, *Proceedings of CogSci 2018*, 40th annual Cognitive Science Society meeting,

Madison Wisconsin USA, July 25-28 2018, Oakbrook Terrace, IL, USA, Cognitive Science

Society, 2018.

Edited Volume:

Asad Sayeed, C. Jacobs, T. Linzen, M. van Schijndel (editors)(2018), *Proceedings of the 8th*

*Workshop on Cognitive Modeling and Computational Linguistics (CMCL 2018)*, January 7,

2018, Salt Lake City, Utah, Association for Computational Linguistics, 2018.

Invited talks

"Representing typical event participants: progress and challenges." February 2018, Uncertainty in Meaning and Representation in Linguistics and Philosophy, Jelenia Góra, Poland.

"Computational models of thematic fit and generalized event knowledge." April 2018, Johns Hopkins, Baltimore.

Conference Organising:

Co-organized Swedish Symposium on Deep Learning, University of Gothenburg, September 2018.