**CLASP Annual Report 2019**

Stergios Chatzikyriakidis and Shalom Lappin

February 12, 2020

**1 Introduction**

CLASP has continued to develop, and to be highly productive in 2019. We have again expanded our staff. We also graduated our first PhD student, Yuri Bizzoni. We organised the International Conference on Computational Semantics in June 2019. 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 five research groups have been active, and they are helping to promote cooperation among our members across our core areas of scientific interest.

This is the fourth annual report for the Centre for Linguistic Theory and Studies in Probability (CLASP), covering our activities in 2019. We are grateful to the members of our Scientific Advisory Board, Alex Clark, Katrin Erk, and Joakim Nivre, for helpful feedback on previous reports. In the current report 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 spreadsheet

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**

In 2019, we have hired the following people:

1. Aram Karimi, half-time programmer
2. Iinis Turunen, administrator (substituting for Susanna Myyry, and replacing JennyTu, who left for a government position)

Susanna Myyry returned to us from her maternity leave in January 2020.

In January/February 2020 the following new PhD students joined us.

1. Axel Almquist
2. Tewordros Gebreselassie
3. Nikolai Ilinykh,

This completes our quota of 12 PhD students on the core funding for the Centre.

As of December 2019, CLASP was comprised of the following staff:

**Director of CLASP**

Shalom Lappin, Professor

**Associate Director**

Stergios Chatzikyriakidis, Researcher and Associate Director (Docent in Computational Linguistics)

**Administrators**

Iinis Turunen

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

**Researchers**

Robin Cooper, Professor Emeritus, Senior Researcher

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 in 2019**

Wafia Adouane

Adam Ek

Yuri Bizzoni (successfully defended his thesis in February 2019)

Mehdi Ghanimifard

Kathrein Abu Kwaik

Vladislav Maraev

Bill Noble

Sylvie Saget

Vidya Somashekarappa

**Programmer**

Aram Karimi

**Associate Member**

Ellen Breitholtz, Researcher

**3 Research Activities and Research Groups**

**Dialogue Group:**

Research in the dialogue research group focussed in 2019 on existing projects (IncReD and DRiPS -- see www.christinehowes.com/research) and in the areas of semantic coordination, dialogue systems, humour and common ground. We have collaborated extensively both locally and internationally (see publications appendix), and continue to attend internationally acclaimed conferences and workshops to disseminate our work and encourage new collaborations. In 2019, we held a workshop on formal approaches to (in)coherence and dynamics in dialogue, funded by the DRiPS project. This workshop brought together a number of researchers, primarily from Nancy and London, with whom we are in the initial stages of preparing an ERC synergy grant proposal about dialogue and interaction in patients with schizophrenia.

This year also saw more cross-group collaborations between the dialogue group and CLASPs other core areas. Several members of the group (Howes (PI), Larsson and Breitholtz, together with Chatzikyriakidis and Sayeed) were involved in a prestigious application to the Knut and Alice Wallenberg foundation about reasoning in dialogue agents which was vetted and approved for submission by Gothenburg University's vice chancellor. Breitholtz and Cooper were also part of the team (led by Sayeed) who received funding from the Marianne and Marcus Wallenberg foundation to apply agent-based simulation techniques to the modelling of manipulative and deceptive political communication. Several other grant proposals are currently in the pipeline. In addition, the CLASP conference on Probability and Meaning (scheduled for June 2020) is co-chaired by Howes and Chatzikyriakidis.

In 2019, several of the invited speakers were specifically relevant to research in the dialogue group, including Heather Burnett, Matthew Marge, Massimo Poesio and Eleni Gregoromichelaki, who also visited on several occasions as a guest researcher in FLoV, working closely with members of the dialogue group (Breitholtz, Cooper, Howes and Larsson). These visits continue in 2020, with, for example, Shiri Lev-Ari coming to give talks in January.

**Machine Learning Group:**

With extensive local and international collaborations and a commitment to language science and cognitive modeling as core targets of our work, the machine learning group has proceeded to grow and develop interests in new areas and applications. Group leader Asad Sayeed continues to work on the intersection between compositional and lexical semantics from a distributional perspective, focusing on semantic roles and discourse coherence, as well as psycholinguistically-oriented work on the interpretation of ambiguous quantifier scopes. For the latter, he also taught an advanced course at ESSLLI 2019. Sayeed continues his collaboration with researchers from Chalmers University of Technology on the agent-based modeling of efficient communication. He also won a Marianne and Marcus Wallenberg Foundation grant to apply agent-based simulation techniques to the modeling of manipulative and deceptive political communication. He will be the Principal Investigator of this project.

New Ph.D. student Vidya Somashekarappa joined the group in 2019, and she has started her Ph.D. project in detecting and identifying gaze coordination strategies in multimodal communication. Our new Ph.D. student Bill Noble started his thesis project on modeling the triggers for meaning negotiation and semantic change. Postdoc Sharid Loáiciga continued her work on event coreference, and she obtained a researcher position at the University of Potsdam, which she took up in January 2020.

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

We are applying Bayesian theory to explain central semantic properties of natural language, such as vagueness of predication, and interpretation through dynamic updates with new information. We are also using this theory to explain psycholinguistic phenomena, in particular, lexical semantic learning.

In 2019 we produced a test-suite of natural language inference problems which we use to test the capabilities of our probabilistic semantic models. We have also built upon our baseline system of 2018 to capture several additional linguistic phenomena, and to develop new models. We report these results in a number of international conference and workshop papers, listed in the publications appendix. We have written an extended draft journal article that presents both the formal foundations, and the implementational details of our work. This article is currently under review.

We are now in discussion with Merhrnoosh Sadrzadeh of the Computer Science Department at University College London on the possibility of a joint research project that combines her work on compositional vector space semantics with our Bayesian semantic inference framework.

**Situated Language and Perception Group:**

The situated language and perception group focused its work on (i) computational models and meaning representations of language, action and perception (Dobnik, Ghanimifard), (ii) semantic models of language and perception (Dobnik, Cooper, Larsson, and Lappin), (iii) visual co-reference (Dobnik and Loáiciga), (iv) meaning and representation learning of contextually diverse languages (Dobnik, Abu Kwaik, Chatzikyriakidis and Bernardy), (v) multi-modal communication, dialogue and perception (Dobnik, Maraev, Saget, Noble, and Somashekarappa). Members of the group have collaborated locally and internationally, attended top-ranked international workshops and conferences, and established new collaborations.

Locally, the group meets fortnightly around a reading group for which students can also receive course credit. Group leader Simon Dobnik has been invited to join the Coordination Group for Artificial Intelligence and Digitisation at University of Gothenburg (SAID) where he contributes to the development of university's policies in this area. From GU we received three grants to organise events with international participation related to AI and NLP: two from AI Competence for an industry day (Chatzikyriakidis) and a masters/doctoral course (Dobnik), and one in collaboration with Språkbanken (Dobnik, Larsson) to re-start the CLT (Centre for Language Technology) seminars, which serve as an interface forum for different groups working on language technology in Gothenburg. The group also worked on several research grant proposals with the aim of expanding its members and establish new international collaborations, for example a proposal to the Swedish Foundation for Strategic Research (SSF) which involves collaboration between three groups in Sweden and two universities in Taiwan.

Internationally, Dobnik, Kelleher and Ghanimifard taught a one week course at ESSLLI-19 in Riga, Latvia. An extension of this course is planned for NASSLLI 2020. Dobnik and Chatzikyriakidis were local organisers and programme co-chairs with Vera Demberg from University of Saarland of IWCS-2019 in Gothenburg. Preparations for the CLASP mid-term conference (Probability and Meaning, PaM) with strong international focus are underway. The conference will include an industry day on the relation between AI and NLP (co-organised by Dobnik and Larsson) that seeks to establish industrial connections between CLASP and open career opportunities to masters and doctoral students. Several international researchers with a research focus close to that of the group visited CLASP and interacted with its members. Some of these include Terry Regier, James Pustejovsky, Massimo Poesio, Thomas Hörberg, Annie Zaenen, Lauri Karttunen, Matthew Marge, Diego Frassinelli and others.

**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, on discussing theoretical and practical issues in type theoretical semantics. The group invited Larry Moss to give a talk on Natural Logic and Natural Language Inference, and Colin Zwanziger from CMU visited us for three months in the Autumn to talk to us about his work on applying Homotopy Type Theory to linguistic semantics. In Autumn 2019, Jean-Philippe Bernardy and Stergios Chatzikyriakidis offered a PhD course on Type Theories and Natural Language Semantics, where the students were introduced to Type Theory using Proof Assistant Technology with an emphasis on NL semantics. The following workshop is scheduled for ESSLLI 2020:

* Stergios Chatzikyriakidis and Rainer Osswald. Workshop on Computing Semantics with Types, Frames and Related Structures.

The members of the group produced several papers in major conferences, journal articles, and book chapters. These are listed in the Publications Appendix.

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

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

CLASP successfully hosted the 13th International Conference on Computational Semantics (IWCS2019). The conference brought 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 2019 showcased work both in symbolic and in machine learning approaches to computational semantics, and everything in between. We received a record number of submissions for IWCS (more than a hundred), and the papers were of very high quality. The proceedings of the conference and collocated workshops are are available at <https://www.aclweb.org/anthology/events/iwcs-2019/>**.**

**6 Joint Research with External Partners**

Shalom Lappin has been working with Jey Han Lau (University of Mebourne), Matthew Purver (Queen Mary University of London), and Carlos Armendariz (Queen Mary University of London) on modelling the effect of context on human sentence acceptability judgments. This work produced a paper that was recently accepted for publication in the *Transactions of the Association of Computational Linguistics*.

Robin Cooper has been working with Jonathan Ginzburg (University of Paris-Diderot) and Andy Lücking (University of Frankfurt). This has produced a paper accepted for the HPSG handbook edited by Stefan Müller. Robin Cooper and Staffan Larsson collaborated with Lücking and Ginzburg on a presentation at the workshop Natural Language and Computer Science. Cooper collaborated with Larry Moss (University of Indiana, Bloomington) and Valeria de Paiva (Nuance) on organizing this workshop.

Ellen Breitholtz, Christine Howes and Robin Cooper continued to work with Mary Lavelle (City, University of London) on the DRiPS project.

Simon Dobnik continued to work with John Kelleher (TU Dublin) on computational modelling of language and perception.

**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 to 3 months). The topics covered by the seminars indicate CLASP’s broad range of research activities. A full list of CLASP seminars, with titles, abstracts, and slides, is available at <https://clasp.gu.se/news-events/past-seminars>.

- Heather Burnett, "A Conceptual Spaces Model of Socially Conditioned Language Change"

- Aarne Talman, "Neural Network of NLI Fail to Capture the General Notion of Inference"

- Oliver Bott, "Incremental Interpretation of Relative Scope?"

- Jey Han Lau, "Deep-speare: A joint neural model of poetic language, meter and rhyme"

- Jey Han Lau, "Early rumour detection"

- Massimo Poesio, "Disagreements in Anaphoric Interpretation"

- Thomas Hörberg, "Expectation-based processing of grammatical functions in Swedish"

- Annie Zaenen "WOPIS: Remarks on Word Order, Prosody and Information Structure: the

prefield in Swedish (and Dutch)"

- Larry Moss "Monotonicity in Natural Language Inference: An Update on Theory and

Practice"

- Lauri Karttunen "Training a Neural Model to Reason with Implicatives"

- Matthew Marge "Towards Natural Dialogue with Robots"

- Colin Zwanziger "Propositional Attitude Operators via Homotopy Type Theory"

**7 PhD Program in Computational Linguistics**

We currently have 11 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 Jean-Philippe Bernardy, second supervisor Shalom Lappin)
3. Mehdi Ghanimifard (started September 2015, first supervisor Simon Dobnik, second supervisor Staffan Larsson)
4. Vladislav Maraev (started September 2017, first supervisor Chris Howes, second supervisor Staffan Larsson, Jonathan Ginzburg, external advisor)
5. Sylvie Saget (started September, 2017, first supervisor Stergios Chatzikyriakidis, second supervisor Dominique Knutsen (Université de Lille))
6. Bill Noble (started September 2018, first supervisor Staffan Larsson, second supervisor Asad Sayeed)
7. Adam Ek (started March 2019, first supervisor Jean-Philippe Bernardy, second supervisor Stergios Chatzikyriakidis)
8. Vidya Somashekarappa (started January 2019, first supervisor Asad Sayeed, second supervisor Chris Howes)
9. Axel Almquist (started January 2020, first supervisor Asad Sayeed, second supervisor Simon Dobnik)
10. Tewordros Gebreselassie (started January 2020, first supervisor Simon Dobnik, second supervisor, Stergios Chatzikyriakidis)
11. Nikolai Ilinykh (stating February 2020, first supervisor Simon Dobnik, second supervisor, Asad Sayeed)

Yuri Bizonni (started September 2015, first supervisor Shalom Lappin, second supervisor Staffan Larsson) successfully defended his thesis in February 2020. Since that time he has been a postdoctoral researcher in an SFB computational linguistics project at the University of Saarlandes.

Our students are making excellent progress, with most of them presenting papers at major international conferences over the past year. Mehdi Ghanimifard is expected to finish in June 2020.

**8 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 increase of approximately 20% in building rental costs which we incurred when we moved to the Humanities building in December 2019.

We have also achieved a significant savings in salary costs due to Shalom Lappin moving from a 75% salary to 50% in January 2020. This move was conditioned by his decision to significantly reduce his commuting schedule between London and Gothenburg, which entails a reduction in travel and housing expenses.

The reports from 2019 also show that the non-salary budget items are within the financial limits, with a small amount of healthy underspending. This is something that was a worry in the first reports, when the group was smaller and underspending seemed to be an issue. Our initial estimate, that the problem would disappear as we grow to full strength, seems to have been correct.

**9 Plans for 2020**

**Probability and Meaning Conference (PaM2020), sponsored by SIGSEM.**

We are organising Probability and Meaning (PaM2020) as a conference for the mid-term point of CLASP’s ten year grant from the VR. It will take place in our new Humanisten Building at the University of Gothenburg, June 3-5, 2020. It is sponsored by SIGSEM http://sigsem.org, the ACL special interest group on semantics. The PaM conference proceedings will be published online in the ACL Anthology for 2020 as a SIGSEM workshop event.

PaM will bring together researchers interested in computationally relevant probabilistic approaches to natural language semantics. It will include symbolic, machine learning and experimental approaches to this task, as well as hybrid models. We have already secured four distinguished invited speakers who have done internationally recognised work on probabilistic modelling of natural language semantics. Information on PaM is available at <https://sites.google.com/view/pam2020/home>.

**Planned visits for 2020**

We have a several scientific visits from international researchers planned. These include Shiri Lev-Ari, Lasha Abzianidze, Desmond Elliot, Jeyan Thiygalingam, and Elin McCready.

**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, EMNLP, IWCS), as well as to leading journals in the field (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 2020 (Chatzikyriakidis) and NASSLLI 2020 (Cooper, Lappin, and Dobnik).

**10 Appendix: Publications, Talks, and Other Scientific Activities**

**Wafia Adouane**

Papers in Refereed Conference Proceedings:

Wafia Adouane, Jean-Philippe Bernardy, and Simon Dobnik (2019), “Normalising Non-

Standardised Orthography in Algerian Code-switched User-generated Data”, *Proceedings*

*of the 5th Workshop on Noisy User-generated Text (W-NUT)*, pp. 131–140, Association

for Computational Linguistics.

Wafia Adouane, Jean-Philippe Bernardy, and Simon Dobnik (2019), “Neural Models for

Detecting Binary Semantic Textual Similarity for Algerian and MSA”, *Proceedings of the*

*4th Arabic Natural Language Processing Workshop (WANLP)*, pp. 78–87, Association for

Computational Linguistics.

**Jean-Philippe Bernardy**

Papers in Refereed Conference Proceedings:

Maximilian Algehed and Jean-Philippe Bernardy. (2019), “Simple noninterference from

parametricity”. In: *Proceedings of the ACM on Programming Languages*, Vol. 3. ICFP,

p. 89

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

Aleksandre Maskharashvili (2019), "Predicates as Boxes in Bayesian Semantics for Natural

Language", *Proceedings of the 22nd Nordic Conference on Computational Linguistics*,

September 30-October 2, Turku, Finland, Linköping University Electronic Press, pp. 333-

337.

Jean-Philippe Bernardy and Stergios Chatzikyriakidis. “A Wide-Coverage Symbolic Natural

Language Inference System”. In: *Proceedings of the 22nd Nordic Conference on*

*Computational Linguistics*, Turku, Finland, September 30-October 2, 2019.

Adam Ek, Jean-Philippe Bernardy, and Shalom Lappin (2019), "Language Modeling with

Syntactic and Semantic Representation for Sentence Acceptability

Predictions", *Proceedings of the 22nd Nordic Conference on Computational Linguistics*,

Turku, Finland, September 30-October 2, 2019.

Jean-Philippe Bernardy and Aleksandre Maskharashvili. (2019), “Two experiments for

embedding Wordnet hierarchy into vector spaces”. In: *Proceedings of the 10th Global*

*WordNet Conference*

Wafia Adouane, Jean-Philippe Bernardy, and Simon Dobnik (2019), “Neural Models for

Detecting Binary Semantic Textual Similarity for Algerian and MSA”. in: *Proceedings of*

*The Fourth Arabic Natural Language Processing Workshop*.

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

Aleksandre Maskharashvili (2019), “Bayesian Inference Semantics: A Modelling System

and A Test Suite”, *Proceedings of the Eighth Joint Conference on Lexical and*

*Computational Semantics (\*SEM)*, pp. 263–272 Minneapolis, July 6–7, 2019.

Jean-Philippe Bernardy and Stergios Chatzikyriakidis (2019), “What Kind of Natural

Language Inference are NLP Systems Learning: Is this Enough?” In: *13th International*

*Conference on Agents and Artificial Intelligence*.

Vladislav Maraev, Christine Howes, and Jean-Philippe Bernardy (2019), “Predicting laughter

relevance spaces in dialogue”. In *Proceedings of the Workshop on Spoken Dialogue*

*Systems (IWSDS*.

Talk:

“Probabilistic Logic for Natural Language Inference”, Thirteenth International Tbilisi Symposium on Language, Logic and Computation, 2019

Other scientific activity:

Course on “Probabilistic Natural Language Inference”, First Tbilisi International Summer School in “Logic, Language, Artificial Intelligence” (Tblissi), 2019

**Yuri Bizzoni**

Papers in Refereed Conference Proceedings:

Marco S. G. Senaldi, Yuri Bizzoni, and Alessandro Lenci (2019), “What Do Neural Network

Learn, When They Learn to Identify Idioms?”, *Proceedings of the Society of Computation*

*in Linguistics* 2 (1), pp. 310-313.

Yuri, Bizzoni (2019), *Detection and Aptness: A study in Metaphor Detection and Aptness*

*Assessment through Neural Networks and Distributional Semantic Spaces*, PhD thesis,

University of Gothenburg.

Yuri Bizzoni and Shalom Lappin (2019), “Predicting Metaphor Paraphrase Judgements in

Context”, *Proceedings of the 13th International Conference on Computational Semantics*

*2019 - Long Papers*, University of Gothenburg, May 2019, pp. 165-174.

**Rasmus Blanck**

Papers in Refereed Conference Proceedings:

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

Aleksandre Maskharashvili (2019), “Predicates as Boxes in Bayesian Semantics for Natural

Language”, in *Proceedings of the 22nd Nordic Conference on Computational Linguistics*

*(NoDaLiDa 2019)*, (B. Plank, ed.), pp. 333–337, Linköping: Linköping University

Electronic Press.

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

Aleksandre Maskharashvili (2019), “Bayesian Inference Semantics: a Modelling System and

a Test Suite”, *in Proceedings of the Eighth Joint Conference on Lexical and Computational*

*Semantics (\*SEM),* Minneapolis, pp. 263–272, Stroudsburg, PA: Association for

Computational Linguistics.

Jean-Philippe Bernardy, Rasumus Blanck, and Aleksandre Maskharashvili (2019), “A Logic

with Measurable Spaces for Natural Language Semantics” (extended abstract), TbiLLC

2019: Thirteenth International Tbilisi Symposium on Language, Logic and Computation.

Peer Reviewed Book Chapter:

Rasumus Blanck, and Aleksandre Maskharashvili (2019), “From Tree Adjoining Grammars

to Higher Order Representations of Abstract Meaning Representations Via Abstract

Categorial Grammars”, in *Logic and Algorithms in Computational Linguistics 2018*

*(LACompLing2018)*, (R. Loukanova, ed.), Studies in Computational Intelligence 860, pp.

67-93, Berlin, Heidelberg, Springer-Verlag.

Talk:

Rasmus Blanck, Löb’s theorem, Colloquium in Logic, University of Gothenburg, 28 March, 2019.

**Ellen Breitholtz**

Papers in Refereed Conference Proceedings:

Ellen Breitholtz and Robin Cooper (2019), “Integrating personae in a TTR account of

“interaction, *Integrating Approaches to Social Meaning*, Riga, 2019.

Ellen Breitholtz, Robin Cooper, Christine Howes, and Mary Lavelle (2019), “Reasoning in

multiparty dialogue involving patients with schizophrenia”, *(In)Coherence in Discourse*,

Springer.

Ellen Breitholtz, and Vlaislav Maraev (2019), “How to Put an Elephant in the Title:

Modelling humorous incongruity with enthymematic reasoning”, *Proceedings of the 23rd*

*Workshop on the Semantics and Pragmatics of Dialogue (SEMDIAL)*,London, United

Kingdom.

Ellen Breitholtz, Bill Noble, and Robin Cooper (2019), “Combining TTR and Game Theory

in Dialogue Modelling”, *Formal Approaches to (In)coherence and Dynamics in*

*Dialogue*, October 9 – 10, Gothenburg.

Researh Grant Awarded:

2020-2025 Marianne och Marcus Wallenbergs stiftelse, 2019.0214 GRIPES - Gothenburg Research Initiative for Politically Emergent Systems. 6 000 000SEK (Project leader: Asad Sayeed; Co-investigators: Ellen Breitholtz, Robin Cooper, Elina Lindgren, Björn R Rönnerstrand)

Talk:

Ellen Breitholtz , Enthymemes and topoi in dialogue - an approach to reasoning in conversa- tion. Express Seminar, ILLC, University of Amsterdam. November 12th 2019.

Workshop Organised:

Workshop on the formal approaches to (in)coherence and dynamics in dialogue. October 9 – 10, Gothenburg.

**Stergios Chatzikyriakidis**

Papers in Refereed Conference Proceedings:

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

Aleksandre Maskharashvili (2019), “Predicates as Boxes in Bayesian Semantics for Natural

Language”, *Proceedings of the 22nd Nordic Conference on Computational Linguistics*,

September 30-October 2, Turku, Finland, Linköping University Electronic Press, pp. 333-

337.

Jean-Philippe Bernardy and Stergios Chatzikyriakidis. “A Wide-Coverage Symbolic Natural

Language Inference System”. In: *Proceedings of the 22nd Nordic Conference on*

*Computational Linguistics*, Turku, Finland, September 30-October 2, 2019.

Kathrein Abu Kwaik, Motaz K Saad, Stergios Chatzikyriakidis, and Simon Dobnik (2019),

“LSTM-CNN Deep Learning Model for Sentiment Analysis of Dialectal Arabic”,

*International Conference on Arabic Language Processing*, France, Springer Science and

Business Media LLC.

Chatrine Qwaider, Stergios Chatzikyriakidis, and Simon Dobnik (2019) “Can Modern

Standard Arabic Approaches be used for Arabic Dialects? Sentiment Analysis as a Case

Study”, *Proceedings of the 3rd Workshop on Arabic Corpus Linguistics*, pp. 40-50.

Jean-Philippe Bernardy and Stergios Chatzikyriakidis (2019), “What Kind of Natural

Language Inference are NLP Systems Learning: Is this Enough?” In: *13th International*

*Conference on Agents and Artificial Intelligence*.

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

Aleksandre Maskharashvili (2019), “Bayesian Inference Semantics: A Modelling System

and A Test Suite”, *Proceedings of the Eighth Joint Conference on Lexical and*

*Computational Semantics (\*SEM)*, pages 263–272 Minneapolis, July 6–7, 2019.

Aarne Talman. and Stergios Chatzikyriakidis (2019), “Testing the Generalization Power of

Neural Network Models Across NLI Benchmarks.”, *Proceedings of the BlackboxNLP*

*Workshop,* ACL 2019.

Journal Article:

Stergios Chatzikyriakidis (in press) “Underspecification, Parsing Mismatches and

Routinization: The Historical Development of the Clitic Systems of Greek”, *Journal of*

*Language, Logic and Information*, special issue on Dynamic Syntax.

Conference Organization:

IWCS2019 (Program co-chair)

Other Scientific Activity:

“From Montague Semantics to Modern Type Theories: A Meaningful Comparison”- Advanced Course in Language and Logic at ESSLLI 2019. Riga, Latvia, 2019 (Chatzikyriakidis, Luo)

Talks:

Stergios Chatzikyriakidis and Zhaohui Luo Gradability in MTT semantics. Thirteenth International Tbilisi Symposium on Language, Logic and Computation.

Stergios Chatzikyriakidis. To infer or not to infer: natural language inference, computational

semantics, and theoretical linguistics, invited talk, Semantics in Athens III.

Edited Conference Volume:

Simon Dobnik, Stergios Chatzikyriakidis, Vera Demberg, Kathrein Abu Kwaik, and

Vladislav Maraev (2019*), Proceedings of the 13th International Conference on*

*Computational Semantics-Student Papers.*

Simon Dobnik, Stergios Chatzikyriakidis, Vera Demberg, Kathrein Abu Kwaik, and

Vladislav Maraev (2019*), Proceedings of the 13th International Conference on*

*Computational Semantics-Long and Short papers.*

Other Scientific Activity:

“From Montague Semantics to Modern Type Theories: A Meaningful Comparison”- Advanced Course in Language & Logic at ESSLLI 2019. Riga, Latvia. 2019. (Chatzikyriakidis, Luo)

**Robin Cooper**

Papers in Refereed Conference Proceedings:

Andy Lücking, Robin Cooper, Staffan Larsson, and Jonathan Ginzburg (2019), “Distribution

is not enough: going Firther”, *Proceedings of the Sixth Workshop on Natural Language*

*and Computer Science*, Gothenburg, Sweden, 24th May 2019, Association for

Computational Linguistics, pp. 1-10.

Ellen Breitholtz and Robin Cooper (2019), “Integrating personae in a TTR account of

“interaction, *Integrating Approaches to Social Meaning*, Riga, 2019.

Ellen Breitholtz, Robin Cooper, Christine Howes, and Mary Lavelle (2019), “Reasoning in

multiparty dialogue involving patients with schizophrenia”, *(In)Coherence in Discourse*,

Springer.

Ellen Breitholtz, Bill Noble, and Robin Cooper (2019), “Combining TTR and Game Theory

in Dialogue Modelling”, *Formal Approaches to (In)coherence and Dynamics in*

*Dialogue*, October 9 – 10, Gothenburg.

Journal Articles:

Robin Cooper, (2018), “Coercion in Languages in Flux”, in Alexandra Anna Spalek and

Matthew Gotham (eds.), “Approaches to Coercion and Polysemy”, Oslo Studies in

Language, Vol. 10, No. 2, pp. 83-96,.

Robing Cooper (2019), “Representing Types as Neural Events”, *Journal of Logic, Language*

*and Information*.

Chapters in Volumes:

Robin Cooper (2019), “Types as Learnable Cognitive  Resources in PyTTR”, in Cleo

Condoravdi and Tracy Holloway King  (eds.), *Tokens of Meaning: Papers in Honor of*

*Lauri Karttunen*, CSLI Publications, pp. 569-586.

Edited Volumes:

Robin Cooper, Valeria de Paiva, and Larry Moss, eds. (2019), *Proceedings of the Sixth*

*Workshop on Natural Language and  Computer Science*, Gothenburg, Sweden, 24th

May, 2019, Association for Computational Linguistics.

Talks:

Robin Cooper, The Role of Mental States and Points of View in the Semantics  of Intensionality, invited talk, Workshop on principles of formal semantics, Stockholm, 27 Sep 2019 to 29 Sep 2019.

Other Scientific Activities:

Robin Cooper and Staffan Larsson, Modelling Linguistic Communication Using Types, course given at ESSLLI 2019, Riga, Latvia

**Simon Dobnik**

Papers in Refereed Conference Proceedings:

Wafia Adouane, Jean-Philippe Bernardy, and Simon Dobnik (2019), “Normalising Non-

Standardised Orthography in Algerian Code-switched User-generated Data”, *Proceedings*

*of the 5th Workshop on Noisy User-generated Text (W-NUT)*, pp. 131–140, Association

for Computational Linguistics.

Wafia Adouane, Jean-Philippe Bernardy, and Simon Dobnik (2019), “Neural Models for

Detecting Binary Semantic Textual Similarity for Algerian and MSA”, *Proceedings of the*

*4th Arabic Natural Language Processing Workshop (WANLP)*, pp. 78–87, Association for

Computational Linguistics.

Simon Dobnik and Sharid Loáiciga (2019), “On Visual Coreference Chains Resolution”,

*Proceedings of the 23rd Workshop on the Semantics and Pragmatics of Dialogue*, London,

UK: Queen Mary University of London.

S. Dobnik and J. D. Kelleher (2019), “Pattern recognition is not enough: representing language, action and perception with modular neural networks”, *Proceedings of LondonLogue*

*– Semdial 2019: The 23rd Workshop on the Semantics and Pragmatics of Dialogue*, pp. 1–

3, London, UK, 4–6 September 2019. Queen Mary University of London.

Mehdi Ghanimifard and Simon Dobnik (2019), “What goes into a word: generating image

descriptions with top-down spatial knowledge”, *Proceedings of the 12th International*

*Conference on Natural Language Generation (INLG)*, Oct 29-Nov 1, Tokyo, Japan.

Mehdi Ghanimifard and Simon Dobnik (2019), “What a neural language model tells us about

spatial relations”, *Proceedings of the Combined Workshop on Spatial Language*

*Understanding (SpLU) and Grounded Communication for Robotics (RoboNLP) at NAACL*

*2019*, June 6, 2019 Minneapolis, Minnesota, USA.

José Miguel Cano Santín, Simon Dobnik, and Mehdi Ghanimifard (2019), “Interactive visual

grounding with neural networks”, *Proceedings of LondonLogue - Semdial 2019: The 23rd*

*Workshop on the Semantics and Pragmatics of Dialogue - Poster Abstracts*, September,

2019, London, United Kingdom.

Kathrein Abu Kwaik, Motaz K Saad, Stergios Chatzikyriakidis, and Simon Dobnik (2019),

“LSTM-CNN Deep Learning Model for Sentiment Analysis of Dialectal Arabic”,

*International Conference on Arabic Language Processing*, France, Springer Science and

Business Media LLC.

Chatrine Qwaider, Stergios Chatzikyriakidis, and Simon Dobnik (2019) “Can Modern

Standard Arabic Approaches be used for Arabic Dialects? Sentiment Analysis as a Case

Study”, *Proceedings of the 3rd Workshop on Arabic Corpus Linguistics*, pp. 40-50.

Arild Matsson, Simon Dobnik, and Staffan Larsson (2019), “ImageTTR: Grounding Type

Theory with Records in image classification for visual question answering”,

*Proceedings of the IWCS 2019 Workshop on Computing Semantics with Types, Frames and*

*Related Structures*, pp. 55–64, Gothenburg, Sweden, June 2019. Association for

Computational Linguistics.

Conference Proceedings Edited:

Simon Dobnik, Stergios Chatzikyriakidis, and Vera Demberg (2019), editors, *Proceedings of*

*the 13th International Conference on Computational Semantics*, Gothenburg, Sweden, 23–

27 May 2019. Association for Computational Linguistics.

Talks:

Simon Dobnik, 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, Language, action and perception. The CLT Retreat, Bohusgården, 7 - 8 May 2019.

Simon Dobnik, Language, action and perception. Talk at the Swedish Dialogue Workshop (Svensk dialogverkstad) 2019, Department of Philosophy, Linguistics and Theory of Science, University of Gothenburg, 13 June 2019.

Simon Dobnik, Dagstuhl Seminar - Leibniz-Zentrum für Informatik: Representing and Solving Spatial Problems (20172), April 19 -- 24, 2020.

Workshop 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.

Other Scientific Activity:

Member of the steering committee of the Centre for Digital Humanities/Centrum för digital humanioras

Member of the SAID group (Samordningsgrupp för artificial intelligens och digitalisering, Coordination group for artificial intelligence and digitalisation) of University of Gothenburg

Language, Action and Perception (APL-ESSLLI) introductory course co-taught and organised with John D. Kelleher and Mehdi Ghanimifard in Language and Computation at the 31st European Summer School in Logic, Language and Information (ESSLLI 2019), University of Latvia, Riga, Latvia

**Adam Ek**

Papers in Refereed Conference Proceedings:

Adam Ek and Mehdi Ghanimifard (2019), “Synthetic Propaganda Embeddings to Train a

Linear Projection”, *Proceedings of the Second Workshop on Natural Language Processing*

*for Internet Freedom: Censorship, Disinformation, and Propaganda at EMNLP 2019*,

shared task, November 4, 2019, Hong Kong, China.   
Adam Ek, Jean-Philippe Bernardy, and Shalom Lappin (2019), “Language Modeling with

Syntactic and Semantic Representation for Sentence Acceptability

Predictions”, *Proceedings of the 22nd Nordic Conference on Computational Linguistics*,

September 30-October 2, Turku, Finland, Linköping University Electronic Press, pp. 76-

85.

**Mehdi Ghanimifard**

Papers in Refereed Conference Proceedings:

Mehdi Ghanimifard and Simon Dobnik (2019), “What goes into a word: generating image

descriptions with top-down spatial knowledge”, *Proceedings of the 12th International*

*Conference on Natural Language Generation (INLG)*, Oct 29-Nov 1, Tokyo, Japan.

Mehdi Ghanimifard and Simon Dobnik (2019), “What a neural language model tells us about

spatial relations”, *Proceedings of the Combined Workshop on Spatial Language*

*Understanding (SpLU) and Grounded Communication for Robotics (RoboNLP) at NAACL*

*2019*, June 6, 2019 Minneapolis, Minnesota, USA.

Adam Ek and Mehdi Ghanimifard (2019), “Synthetic Propaganda Embeddings to Train a

Linear Projection”, *Proceedings of the Second Workshop on Natural Language Processing*

*for Internet Freedom: Censorship, Disinformation, and Propaganda at EMNLP 2019*,

shared task, November 4, 2019, Hong Kong, China.

José Miguel Cano Santín, Simon Dobnik, and Mehdi Ghanimifard (2019), “Interactive visual

grounding with neural networks”, *Proceedings of LondonLogue - Semdial 2019: The 23rd*

*Workshop on the Semantics and Pragmatics of Dialogue - Poster Abstracts*, September,

2019, London, United Kingdom.

**Christine Howes**

Papers in Refereed Conference Proceedings:

Arash Eshghi, Vladislav Maraev, Chris Howes, Julian Hough, and Chiara Mazzocconi (2019),

“What are you laughing at?” incremental processing of laughter in interaction”,

*Proceedings of the 23rd Workshop on the Semantics and Pragmatics of Dialogue - Poster*

*Abstracts*, London, United Kingdom. SEMDIAL.

Eleni Gregoromichelaki, Christine Howes, Arash Eshghi, Ruth Kempson, Julian Hough,

Mehrnoosh Sadrzadeh, Matthew Purver, and Gijs Wijnholds (2019), “Normativity,

Meaning Plasticity, and the Significance of Vector Space Semantics”, *Proceedings of the*

*23rd Workshop on the Semantics and Pragmatics of Dialogue.* London, United Kingdom.

Christine Howes and Arash Eshghi (2019), “Feedback Relevance Spaces: A Dynamic Syntax

Account of Dialogue Data”, *The third Dynamic Syntax conference*.

Christine Howes and Arash Eshghi (2019), “Interjection as coordination device: feedback

relevance spaces”, *16th International Pragmatics Conference*, Hong Kong.

C. Howes, M. Lavelle, P. G. Healey, and R. McCabe (2019), “Is this funny? Shared

conversational laughter in schizophrenia”, *On Laughter Conference*.

Ruth Kempson, Julian Hough, Christine Howes, Matthew Purver, Pat G. Healey, and Arash

Eshghi, and Eleni Gregoromichelaki (2019), “Why natural language models must be partial

and shifting: a Dynamic Syntax with Vector Space Semantics perspective”, *Vector*

*Semantics for Dialogue and Discourse Workshop*, IWCS 2019, Gothenburg 2019. [

Ruth Kempson, Christine Howes, Arash Eshghi, Julian Hough, and Eleni Gregoromichelaki

(2019), “Reflections on language, cognition, normativity and evolution”, *The third*

*Dynamic Syntax Conference.*

Vladislav Maraev, Christine Howes, and Jean-Philippe Bernardy, J.-P (2019b), “Predicting

laughter relevance spaces”, *Proceedings of the International Workshop on Spoken Dialog*

*System Technology*.

Vidya Somashekarappa, Chrisitne Howes, and Asad Sayeed (2019), “Eye Gaze in Interaction:

Towards an Annotation Scheme for Dialogue”, *Proceedings of the 23rd Workshop on the*

*Semantics and Pragmatics of Dialogue - Poster Abstracts*. London, United Kingdom.

Ruth Kempson, Eleni Gregoromichelaki, Christine Howes (2019), “Language as Mechanisms

for Interaction: Towards an Evolutionary Tale”, *Language, Logic, and Computation*,

Springer, Peer-reviewed conference contributions.

Christine Howes, A. Bondarenko, and Staffan Larsson (2019), “Good call! Grounding in a

Directory Enquiries Corpus*”, Proceedings of the 23rd Workshop on the Semantics and*

*Pragmatics of Dialogue*, London, United Kingdom.

Edited volumes

Christine Howes, Julian Hough, and C. Kennington (2019), *Proceedings of the 23rd*

*Workshop on the Semantics and Pragmatics of Dialogue*, London, United Kingdom.

Digital Corpus:

A Bondarenko, Christine Howes, and Staffan Larsson (2019), *Directory Enquiries Corpus*, Open Science Foundation (OSF), Övrigt 2019

Workshop Organised:

Workshop on Formal Approaches to (In)coherence and Dynamics in Dialogue, 9th and 10th October 2019 <http://www.christinehowes.com/drips-workshop>

**Aram Karimi**

Scientific Activity:

I started to work on the 1st of October, 2019. My first collaboration was with Staffan and Vlad on JVoiceXML. I ran it, and I fixed an error in the code. Due to issues and bugs with the program, Staffan and Vlad have decided to use another platform, RASA, for their research.

My second task is a collaboration with Asad in training and running proto role labeling (SPRL) with argument-predicate marker embeddings for our data. I am currently working on this project. My main task is to revise and pre-process prop-bank based data that feeds a neural network. This network predicts up to 18 proto role properties for this data. The labels that it assigns will be used for another project.

**Shalom Lappin**

Papers in Refereed Conference Proceedings:

Adam Ek, Jean-Philippe Bernardy, and Shalom Lappin (2019), “Language Modeling with

Syntactic and Semantic Representation for Sentence Acceptability

Predictions”, *Proceedings of the 22nd Nordic Conference on Computational Linguistics*,

September 30-October 2, Turku, Finland, Linköping University Electronic Press, pp. 76-

85.

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

Aleksandre Maskharashvili (2019), “Predicates as Boxes in Bayesian Semantics for Natural

Language”, *Proceedings of the 22nd Nordic Conference on Computational Linguistics*,

September 30-October 2, Turku, Finland, Linköping University Electronic Press, pp. 333-

337.

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

Aleksandre Maskharashvili (2019), “Bayesian Inference Semantics: A Modelling System

and A Test Suite”, *Proceedings of the Eighth Joint Conference on Lexical and*

*Computational Semantics (\*SEM)*, pages 263–272 Minneapolis, July 6–7, 2019.

Yuri Bizzoni and Shalom Lappin (2019) “Predicting Metaphor Paraphrase Judgements in

Context”, *Proceedings of the 13th International Conference on Computational Semantics*

*2019 - Long Papers*, University of Gothenburg, May 2019, pp. 165-174.

Invited Conference Talk:

Shalom Lappin, Augmenting Deep Learning with Syntactic and Semantic Annotation,

Colloque de Syntax et Sémantique 2019, CNRS, Paris, October 3, 2019.

**Staffan Larsson**

Papers in Refereed Conference Proceedings:

Andy Lücking, Robin Cooper, Staffan Larsson, and Jonathan Ginzburg (2019), “Distribution

is not enough: going Firther”, *Proceedings of the Sixth Workshop on Natural Language*

*and Computer Science*, Gothenburg, Sweden, 24th May 2019, Association for

Computational Linguistics, pp. 1-10.

Arild Matsson, Simon Dobnik, and Staffan Larsson (2019), “ImageTTR: Grounding Type

Theory with Records in image classification for visual question answering”,

*Proceedings of the IWCS 2019 Workshop on Computing Semantics with Types, Frames and*

*Related Structures*, pp. 55–64, Gothenburg, Sweden, June 2019. Association for

Computational Linguistics.

Christine Howes, A. Bondarenko, and Staffan Larsson (2019), “Good call! Grounding in a

Directory Enquiries Corpus*”, Proceedings of the 23rd Workshop on the Semantics and*

*Pragmatics of Dialogue*, London, United Kingdom.

Staffan Larsson, Bill Noble, and Asad Sayed (2019), “Towards a formal model of word

meaning negotiation”, poster at *the 23rd Workshop on the Semantics and Pragmatics of*

*Dialogue (SemDial/LondonLogue),* September 5, 2019.

Talks:

Staffan Larson, Meaning as Coordinated Compositional Classification, invited talk, SemDIAL, London, September 2019.

Digital Corpus:

A Bondarenko, Christine Howes, and Staffan Larsson (2019), *Directory Enquiries Corpus*,

Open Science Foundation (OSF), Övrigt 2019.

Other Scientific Activities:

Robin Cooper and Staffan Larsson, Modelling Linguistic Communication Using Types, course given at ESSLLI 2019, Riga, Latvia

**Sharid Loáiciga**

Papers in Refereed Conference Proceedings:

Yves Scherrer, Jörg Tiedemann and Sharid Loáiciga (2019), “Analysing concatenation

approaches to document-level NMT in two different domains”, *Proceedings of the Fourth*

*Workshop on Discourse in Machine Translation (DiscoMT 2019)*, Hong Kong: Association

for Computational Linguistics, pp. 51–61.

Simon Dobnik and Sharid Loáiciga (2019), “On Visual Coreference Chains Resolution”,

*Proceedings of the 23rd Workshop on the Semantics and Pragmatics of Dialogue*, London,

UK: Queen Mary University of London.

Ekaterina Lapshinova-Koltunski, Sharid Loáiciga, Christian Hardmeier, and Pauline Krielke

(2019), “Cross-lingual Incongruences in the Annotation of Coreference”, *Proceedings of the*

*Second Workshop on Computational Models of Reference, Anaphora and Coreference*,

Minneapolis, Minnesota: Association for Computational Linguistics, pp. 26–34.

Edited Conference Proceedings:

Andrei Popescu-Belis, Sharid Loáiciga, Christian Hardmeier and Deyi Xiong (2019), editors,

*Proceedings of the Fourth Workshop on Discourse in Machine Translation (DiscoMT*

*2019)*, Hong Kong: Association for Computational Linguistics.

**Vladislav Maraev**

Papers in Refereed Conference Proceedings:

Ellen Breitholtz and Vladislav Maraev (2019), “How to put an elephant in the title: Modeling

*humorous incongruity with topoi”, Proceedings of the 23rd Workshop on the Semantics*

*and Pragmatics of Dialogue - Full Papers*, London, United Kingdom. SEMDIAL.

Arash Eshghi, Vladislav Maraev, Chris Howes, Julian Hough, and Chiara Mazzocconi (2019),

“What are you laughing at?” incremental processing of laughter in interaction”,

*Proceedings of the 23rd Workshop on the Semantics and Pragmatics of Dialogue - Poster*

*Abstracts*, London, United Kingdom. SEMDIAL.

Vladislav Maraev, Arash Eshghi, Julian Hough, Christine Howes, and Chiara Mazzocconi

(2019a), “Laughter relevance spaces”, *The 3rd Dynamic Syntax Conference*.

Vladislav Maraev, Chris Howes, and Jean- Philippe Bernardy, J.-P (2019b), “Predicting

laughter relevance spaces”, *Proceedings of the International Workshop on Spoken Dialog*

*System Technology*.

Elena Mikhalkova, Nadezhda Ganzherli, Vladislav Maraev, Anna Glazkova, Dmitriy

Grigoriev (2019), “A comparison of algorithms for detection of “figurativeness” in

metaphor, irony and puns” in van der Aalst W. et al. (eds), *Analysis of Images, Social*

*Networks and Texts. AIST 2019*, Springer, Lecture Notes in Computer Science.

Bill Noble and Vladislav Maraev (2019), “Neural dialogue act recognition with transformer

pre-training”, *Vector Semantics for Dialogue and Discourse workshop at IWCS 2019*,

Gothenburg, Sweden.

Edited Conference Volume:

Simon Dobnik, Stergios Chatzikyriakidis, Vera Demberg, Kathrein Abu Kwaik, and

Vladislav Maraev (2019*), Proceedings of the 13th International Conference on*

*Computational Semantics-Student Papers.*

Talks:

Vladislav Maraev, Humour in Dialogue Dynamics, June 25, 30th ISHS Conference 2019, Austin, USA; joint work with Ellen Breithholtz (University of Gothenburg).

Vladislav Maraev, Detecting Incongruity in Figurative Speech with Multi-task Learning Methods, June 25, 30th ISHS Conference 2019, Austin, USA; joint work with Elena Mikhailova and Nadezhda Ganzherli (Tyu- men State University)

Vladislav Maraev, Laughter relevance spaces, May 7, CLT retreat, Bohusgården, Sweden.

Travel Grant:

Adlerbertska Stipendier travel grant (20 000 SEK)

**Aleksandre Maskharashvili**

Papers in Refereed Conference Proceedings:

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

Aleksandre Maskharashvili (2019), "Predicates as Boxes in Bayesian Semantics for Natural

Language", *Proceedings of the 22nd Nordic Conference on Computational Linguistics*,

September 30-October 2, Turku, Finland, Linköping University Electronic Press, pp. 333-

337.

Jean-Philippe Bernardy and Aleksandre Maskharashvili. (2019), “Two experiments for

embedding Wordnet hierarchy into vector spaces”. In: *Proceedings of the 10th Global*

*WordNet Conference*

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

Aleksandre Maskharashvili (2019), “Bayesian Inference Semantics: A Modelling System

and A Test Suite”, *Proceedings of the Eighth Joint Conference on Lexical and*

*Computational Semantics (\*SEM)*, pp. 263–272 Minneapolis, July 6–7, 2019.

Peer Reviewed Book Chapter:

Rasumus Blanck, and Aleksandre Maskharashvili (2019), “From Tree Adjoining Grammars

to Higher Order Representations of Abstract Meaning Representations Via Abstract

Categorial Grammars”, in *Logic and Algorithms in Computational Linguistics 2018*

*(LACompLing2018)*, (R. Loukanova, ed.), Studies in Computational Intelligence 860, pp.

67-93, Berlin, Heidelberg, Springer-Verlag.

Talks:

Aleksandre Maskharashvili, Invited lecturer at Summer School First Tbilisi International Summer School in Logic, Language, Artificial Intelligence, September 20.

**Bill Noble**

Papers in Refereed Conference Proceedings:

Vladislav Maraev and Bill Noble (2019), “Neural dialogue act recognition with transformer

pre-training”, poster and “lightening talk” at the *Vector Semantics for Dialogue and*

*Discourse (VSDD) Workshop,* May 24, 2019.

Bill Noble (2019), “A formal model of word meaning negotiation”, 15-minute talk at the

*Swedish Dialogue Workshop*, June 14, 2019.

Staffan Larsson, Bill Noble, and Asad Sayed (2019), “Towards a formal model of word

meaning negotiation”, poster at *the 23rd Workshop on the Semantics and Pragmatics of*

*Dialogue (SemDial/LondonLogue),* September 5, 2019.

Ellen Breitholtz, Robin Cooper, and Bill Noble (2019), “Combining TTR and game theory in

dialogue modelling”, *Workshop on Formal Approaches to (In)coherence and Dynamics in*

*Dialogue*, October 9, 2019.

Travel Grants:

Donation Board travel grant (SEK 20,000). Awarded April 11, 2019.

Other Scientific Activities:

Attended ESSLLI courses in Riga. August 5-16, 2019

Attended the Young Researchers Roundtable on Spoken Dialogue Systems. September 4-6, 2019.

**Chatrine Qwaider**

Papers in Refereed Conference Proceedings:

Kathrein Abu Kwaik, Motaz K Saad, Stergios Chatzikyriakidis, and Simon Dobnik (2019),

“LSTM-CNN Deep Learning Model for Sentiment Analysis of Dialectal Arabic”,

*International Conference on Arabic Language Processing*, France, Springer Science and

Business Media LLC.

Chatrine Qwaider, Stergios Chatzikyriakidis, and Simon Dobnik (2019) “Can Modern

Standard Arabic Approaches be used for Arabic Dialects? Sentiment Analysis as a Case

Study”, *Proceedings of the 3rd Workshop on Arabic Corpus Linguistics*, pp. 40-50.

Kathrein Abu Kwaik and Motaz Saad (2019), “Language Modelling and Ensemble Learning

for Fine Grained Arabic Dialect Identification”, *Proceedings of the Fourth Arabic Natural*

*Language Processing Workshop*, ArbDialectID at MADAR Shared Task 1, pp. 254-258,

Association for Computational Linguistics.

**Sylvie Saget**

Papers in Refereed Conference Proceedings:

Sylvie Saget, Alina Yarmina, Marina Escobar Planas (2019), “Developing strategies to stop

bullying: Design considerations for an artificial training center”, *Dialog for Good (DiGo)*

*2019: Workshop on Speech and Language Technology Serving Society*, Stockholm, 10

September, 2019.

Sylvie Saget (2019), “Preliminaries to Acceptance-based Pragmatics”, poster, *Rational*

*Approaches in Language Science*, 24-26 October, 2019 Saarbruecken, Germany.

Sylvie Saget (2019), “Language as a tool: Towards a cognitive architecture”, poster, *25th*

*AMLaP - Architectures and Mechanisms of Language Processing*, Moscow.

Travel Grant:

EU grant to fund participation at HUMAINT 2019

Talks:

Sylvie Saget, Conversational AI, Advances in AI, Chalmers, Gothenburg, Poster Presentation, March 4-5, 2019, Dialogue Management and Memory, Swedish Dialog Workshop, Gothenburg

Sylvie Saget, Acceptance-based Pragmatics and Conversational AI, FMAI 2019 - Second Workshop on Formal Methods and AI, 2-3 mai, 2019, Rennes

Other Scientific Activity:

Among the 80 participants selected to attend HUMAINT 2019 & the 45 participants selected to attend HUMAINT 2020

Reviewer - LChange'19, ACL workshop - 1st International Workshop on Computational Approaches to Historical Language Change 2019

**Asad Sayeed**

Papers in Refereed Conference Proceedings:

Bill Noble, Asad Sayeed, and Staffan Larsson (2019), “Towards a Formal Model of Word

Meaning Negotiation”, *Proceedings of the 23rd Workshop on the Semantics and*

*Pragmatics of Dialogue (SEMDIAL)*, London, United Kingdom.

Vidya Somashekarappa, Christine Howes, and Asad Sayeed (2019), “Eye Gaze in Interaction:

Towards an Annotation Scheme for Dialogue”, *Proceedings of the 23rd Workshop on the*

*Semantics and Pragmatics of Dialogue (SEMDIAL)*, London, United Kingdom.

Asad Sayeed, Matthias Lindemann, and Vera Demberg (2019), “Verb-Second Effect on

Quantifier Scope Interpretation”, *Proceedings of the Workshop on Cognitive Modeling and*

*Computational Linguistics (CMCL)*, 2019 conference of the North American chapter

of the Association for Computational Linguistics (NAACL 2019). Minneapolis, USA.

Fangzhou Zhai, Vera Demberg, Pavel Shkadzko, Wei Shi, and Asad Sayeed (2019), “A

Hybrid Model for Globally Coherent Story Generation”, *Proceedings of the Second*

*Workshop on Storytelling*, 57th annual meeting of the Association for Computational

Linguistics (ACL 2019). Florence, Italy.

Invited talks

Asad Sayeed**,** Partitioning of semantic spaces for efficient communication. Saarland University, Germany.  2019-04-15.

Asad Sayeed , A reinforcement-learning approach to the lexical partitioning of a semantic space. University of Alberta, Edmonton, Canada.  2019-06-28.

Summer School Course:

ESSLLI Course, 5 lectures, Scope in an Incremental Context.  University of Latvia, Riga, Latvia. 2019-08-05 to 2019-08-09.

Research Grant Awarded

Marianne och Marcus Wallenbergs stiftelse, 2019.0214. GRIPES - Gothenburg  Research Initiative for Politically Emergent Systems. 6 000 000SEK (Project leader: Asad Sayeed; Co-investigators: Ellen Breitholtz, Robin Cooper, Elina Lindgren, Björn Rönnerstrand. Additionally, funding was given for one Ph.D. student on top of the granted amount.)

Conference organization:

Workshops chair, International Conference on Computational Semantics (IWCS 2019).

**Vidya Somashekarappa**

Papers in Refereed Conference Proceedings:

Vidya Somashekarappa, Christine Howes, and Asad Sayeed (2019), “Eye gaze in interaction:

towards an annotation scheme for dialogue”, *Proceedings of the 23rd Workshop on the*

*Semantics and Pragmatics of Dialogue (SEMDIAL) - Short Papers*, London, United

Kingdom.

Talks:

Vidya Somashekarappa, Eye gaze in dialogue, May 7, 2019 CLT retreat, Bohusgården, Sweden.

Workshops and Summer School Participation:

The 13th Swedish Dialogue Workshop (2019), 14th June, Gothenburg, Sweden.

Vector Semantics for Dialogue and Discourse workshop, IWCS (2019), Gothenburg, Sweden.

The Workshop on Formal Approaches to (In)coherence and Dynamics in Dialogue (2019), October 9th-10th, Gothenburg, Sweden.

The 31st edition of European Summer School in Logic, Language and Information (2019), August 5th-16th, University of Latvia, Riga.

Papers Reviewed:

1st International Workshop on Computational Approaches to Historical Language Change, ACL (2019), August 2nd, Florence, Italy (2 papers).