CLASP Annual Report 2023

Sharid Loáiciga

February 21, 2024

1 Introduction

We concluded 2023 with the good news that VR will allow us to use our remaining funds during a two-year extension, prolonging the CLASP project until the end of 2027.

Several CLASP members, including Chris Howes, Staffan Larsson, Rasmus Blanck, and Simon Dobnik, have been successful with research project applications this year. Although not all applications receive explicit mention unless they are positive, efforts to secure funding are ongoing, with many members diligently submitting grant applications.

As CLASP approaches its conclusion, we see a consolidation of the PhD program in computational linguistics within FLoV, which means that it will play a permanent role in FLoV's research even after the end of CLASP. In line with this expansion and our growing operational needs, we have recently welcomed a new system administrator, Kaj Ailomaa, to our team.

2 CLASP Staff

After a recent illness, Shalom Lappin wished to be relieved of administrative duties in CLASP but continued in 2023 as Chief Scientist.

During 2023, Nina Tahmasebi has filled the position for one or more Senior Lecturers advertised at the end of 2022. Additionally, Aram Karimi has ended her position as programmer with us and has transitioned to a position as Systems Developer at the Gothenburg Research Infrastructure Digital Humanities (GRIDH). Last, Jean-Philippe Bernardy took up a position as a Senior Lecturer at Chalmers, Department of Computer Science and Engineering, and continues to collaborate with researchers in CLASP.

We had decided at the end of 2022 to recruit additional post-doctoral researchers. Two postdocs, Bill Noble and David Pagmar, were recruited to work on specific research projects with senior members. Currently, we are in the middle of the recruitment process for two additional post-docs.

Our current staff is composed of:

Researchers:

Jean-Philippe Bernardy Researcher in CLASP (until April 2023)

Rasmus Blanck Associate Senior Lecturer in Computational Linguistics

Ellen Breitholtz Senior Lecturer in Linguistics in FLoV, researcher in

CLASP

Robin Cooper Senior Researcher at CLASP, Professor emeritus of Com-

putational Linguistics, Acting head of CLASP

Simon Dobnik Professor of Computational Linguistics

Christine Howes Professor of Computational Linguistics

Aram Karimi Researcher and programmer (until October 2023)

Shalom Lappin Professor, Senior Researcher, Chief Scientist of CLASP

Staffan Larsson Professor of Computational Linguistics

Sharid Loáiciga Associate Senior Lecturer in Computational Linguistics,

Coordinating Director of CLASP

Asad Sayeed Senior Lecturer in Machine Learning (Docent in Compu-

tational Linguistics)

Post Doctoral Researchers:

David Pagmar

Amy Qiu (postdoc on Chris Howes' ERC Starting Grant)

PhD Students:

Alexander Berman

Amandine Decker (double degree agreement with the University of Lorraine,

Nancy, France)

Adam Ek (defended on 8 September 2023)

Tewodros Gebreselassie (on indefinite leave of absence)

Nikolai Ilinykh

Bill Noble (defended on 20 April 2023, started as post-doc January

2024)

Vidya Somashekarappa

Associate Researchers:

Stergios Chatzikyriakidis Associate Director of CLASP until June 2021. He is cur-

rently Professor of Computational Linguistics at the Uni-

versity of Crete.

Alexander Clark Researcher in computational linguistics specialising in

grammatical inference, and theoretical and mathematical

approaches to natural language.

Chris Fox Previously Reader in Computer Science (Essex, UK), re-

searcher in computational linguistics and formal semantics

Eleni Gregoromichelaki Professor of Linguistics in the Department of Philosophy,

Linguistics, and Theory of of Science at the University of

Gothenburg.

Ruth Kempson Fellow of the British Academy, Member of Academia Eu-

ropaea, Professor Emerita of Linguistics, Philosophy De-

partment, King's College London.

Nina Tahmasebi Senior Lecturer in Computational Linguistics in FLoV.

Administrators:

Susanna Myyry

3 Research Activities and Research Groups

3.1 Dialogue group

The dialogue group continues to grow, with Amy Han Qiu and David Pagmar starting as postdocs in October 2023, Bill Noble rejoining CLASP as a postdoc in January 2024 and a new PhD student Vanessa Vanzan joining the group in February 2024. Vlad Maraev will also remain in the group as he received an International Post Doc grant from the Swedish Research Council (VR) on "So-cLaVA: Social laughter for virtual agents". The terms of this award, which started in December 2023, mean that Vlad will continue to be employed by the department, and will spend two of his three years employment at the Sorbonne University in Paris, in the Institute Of Intelligent Systems And Robotics, working with Catherine Pelachaud.

We continue to publish in a wide variety of venues with many internal and external collaborators (see publications, appendix A), and meet fortnightly for our Dialogue Reading Group. Staffan Larsson and Jenny Myrendal started their work on their VR grant "Not Just Semantics: Word Meaning Negotiation in Social Media and Spoken Interaction" and Christine Howes started work on her ERC Starting Grant "Divergence and convergence in dialogue: The dynamic management of mismatches" with Vlad Maraev, Eleni Gregoromichelaki, Ellen Breitholtz, and Amy Han Qiu. PhD student Vanessa Vanzan was appointed and recruitments for another PhD student and postdoc are in the pipeline. Asad Sayeed, Ellen Breitholtz and Robin Cooper continued work in the GRIPES project².

¹https://www.christinehowes.com/divcon

²https://www.gu.se/en/research/gripes-gothenburg-research-initiative-for-politically-emergent-systems, see details in section 3.2

We also welcomed Sara Amido (a PhD student studying confrontational dialogue at The University of Pompeu-Fabra in Barcelona) for an extended research visit from October to December 2023.

3.2 Machine learning, cognitive modeling, and natural language processing group

2023 saw Vidya Somashekarappa approach completion of her thesis with two conference publications and innovative new experiments on gaze with the Furhat embodied agent simulator. A "green reader" was recruited to review and approve her early draft for defence in 2024.

The GRIPES project on political dogwhistles recruited a new member, Max Boholm, a researcher at the business school, who had completed a Master of Language Technology with a thesis under Asad Sayeed's supervision. Part of this thesis (on modeling dogwhistles as a form of semantic change) was published at an EMNLP workshop. GRIPES also submitted two articles to major journals in political communication, one of them was accepted and will appear in 2024 (not listed in this report). GRIPES continued its longitudinal study of the Swedish population's understanding of political dogwhistles through GU's in-house survey organization LORE. Asad went to present results at the American Political Science Association's meeting in Los Angeles at the end of August.

The collaboration with Saarland University continued with groundbreaking publications on visual storytelling. One of them is an accepted proposal for a shared task at the INLG conference. In addition, Asad Sayeed and Sharid Loáiciga collaborated with Xudong Hong at Saarland to make a submission to the BabyLM workshop with an innovating language model training algorithm.

David Pagmar joined the group as a new postdoc. He has been designing an experiment on the scope interpretation of the Swedish indefinite article which will launch 2024. Collaborations with Yuval Marton at the University of Washington and Daniel Bauer at Columbia University also continued during 2023.

3.3 Type Theory and Logic group

The group has seen some changes in both composition and organisation during the year, as the two previous members Jean-Philippe Bernardy and Julian Grove have departed the group. Bill Noble has been recruited as a postdoc to work on the interaction between logic and machine learning approaches, which motivates the addition of the word "logic" in the group name. The group members also continue the ongoing exploration of the connections between type theory and probability and/or machine learning, resulting in several conference papers and journal articles during 2023, as listed in the publications appendix A.

Noteworthy book projects from the group includes Robin Cooper's *From Perception to Communication: a Theory of Types for Action and Meaning* (Oxford University Press), as well as his collaboration with Stergios Chatzikyriakidis (University of Crete), Eleni Gregoromichelaki (FLoV) and Peter Sutton (Universidad Pompeu Fabra, Barcelona) on the short book *Theories of Types and the Structure of Meaning*, to be published by Cambridge University Press.

There has been a number of forward-looking activites during the year. Rasmus Blanck and Robin Cooper successfully landed a three-year grant from the Swedish Research Council to work with Zachiri McKenzie (University of Chester) on the foundations of TTR and probabilistic semantics. Bill Noble and Rasmus Blanck have received funding for hosting Gijs Wijnholds (Leiden University) for three weeks to initiate a research collaboration on the topic of integrating for-

mal semantics and large language models. Staffan Larsson and Robin Cooper have submitted an ERC Synergy Grant application on neuro-cognition and language learning, together with Jonathan Ginzburg (Université Paris Cité), Catherine Pelachaud (CNRS), and Chris Eliasmith (University of Waterloo).

Some group members are involved in the organisation of the 2024 Logic Colloquium and its special session on Logic, Language and Computation, to be held at the University of Gothenburg in June 2024.

3.4 Cognitive Systems Group

The group welcomed Elham Alighardash, a doctoral student at Bu-Ali Sina University in Hamedan, Iran to join the group as a visiting doctoral student for 12 months.

In January, Dobnik started work on the Mormor Karl research environment (PI Elena Volodina)³ which will run for 6 years. Maria Irena Szawerna and Ricardo Muñoz Sánchez, both employed at Språkbanken Text at the Department of Swedish, Multilingualism, Language Technology (SFS), have joined the project as doctoral students. They are co-supervised by Dobnik and have become engaged with the cognitive systems group.

A post-doctoral position with specialisation in language grounding to vision and robotics was advertised and a final offer made but the selected candidate declined it. The position has been re-advertised with new applications currently under review.

The group's research has focused around diverse themes including the effects of perceptual and linguistic context on neural multi-modal generation and understanding of language, representation, grounding, linguistic variation, contributions of background knowledge such as graphs, multi-modal data collection and interaction, small data, and ethical questions. The activities resulted in several papers as listed in appendix A.

The group meets fortnightly to discuss current research. A significant credit for this goes to Ilinykh who has appreciably contributed to our research environment. This year the meetings have also included several external speakers, forward looking to new potential collaborations.

Dobnik and Ilinykh co-organised the Workshop on Resources and representations for under-resourced languages and domains (RESOURCEFUL-2023) held at NoDaLiDa-2023 in Tórshavn, Faroe Islands on 22nd May. Dobnik, Szawerna and Muñoz Sánchez co-organised a Workshop for Research and Teaching in NLP⁴ held on 24 January this year.

Dobnik has received a three-year project grant "Beyond pixels and words: computational generation and understanding of spatial language in action" which includes John D Kelleher, Trinity College Dublin and a postdoctoral researcher whose position will be advertised in the autumn. Gregoromichelaki and Dobnik have received a two year grant from EUTOPIA Integrated Connect Communities⁶, CC1.1_GU Grounding Human-Centred AI on Embodied Multimodal Interaction, a research initiation grant which will strengthen our work with University Pompeu Fabra, Barcelona and University of Ljubljana.

³Contract No. VR 2022-02311 https://mormor-karl.github.io

⁴https://www.gu.se/en/research/ethics-for-nlp-natural-language-processing

⁵Contract No. VR 2023-01552

⁶https://eutopia-university.eu/english-version/integrated-connected-communities

4 Scientific Activities

Building on the momentum from the (Dis)Embodiment conference in 2022, for our 2023 conference, we chose a topic in line with the discussions in the broader ACL community. The topic was Learning with Small Data (LSD), which resonated well with the interest in LLMs and Chat-GPT, deployed at the end of 2022. LSD (September 11-12) was very successful, with 90 people registered among which 75 in-person.

The discussion of the conference centered around the significant limitations of large language models (LLMs), despite achieving remarkable success across various tasks in NLP and AI in general. LLMs require vast amounts of data and training time, often monopolized by big tech companies. Additionally, their complexity makes it challenging to understand their ability to generalize and decision-making process. Moreover, their success has led to decreased interest in alternative training approaches and cognitively plausible models.

The invited speakers covered three main perspectives of this discussion, computational linguistics, cognitive modeling and human language acquisition:

- Aurélie Herbelot, Possible Worlds, talk: Decentralised semantics
- Tal Linzen, New York University & Google, talk: How much data do neural networks need for syntactic generalization?
- Danielle Matthews, University of Sheffield, talk: How children learn to use language through interaction.

As in previous years, we continue holding a **weekly research seminar**, now permanently in hybrid format. Whenever possible, it is preferable for our guest speakers to visit CLASP in person. However, the option to give their presentation online is always available as a practical alternative.

We strive to invite guest speakers from diverse affiliations, including both national and international institutions, whose work is relevant to the different areas of interest in CLASP. The seminar is also a forum for CLASP researchers to present ongoing work, and it gives the PhD students an opportunity to receive useful feedback.

The list of guests at the CLASP research seminar during 2023 includes:

- Alexander Warstadt, ETH Zürich, Language Models and Human Language Acquisition.
- Staffan Larsson, University of Gothenburg, TTR at the SPA: Relating type-theoretical semantics to neural semantic pointers.
- Noortje J. Venhuizen, Tilburg University, *Expectation-based Semantics in Language Comprehension*.
- Nina Tahmasebi, University of Gothenburg, *Ongoing research in the Change is Key! program*.
- Claire Gardent, LORIA, CNRS & Université de Lorraine, Simplifying Documents
- Christopher Potts, Stanford University, Causal abstraction for faithful, human-interpretable model explanations.
- Alexander Berman, University of Gothenburg, Counterfactual reasoning capabilities of GPT: Preliminary findings.

- Stephen Clark, Quantinuum, Hybrid Recurrent Architectures for Quantum-Classical NLP.
- Hannah Rohde, University of Edinburgh, Informativity in cooperative communication.
- Asad Sayeed, University of Gothenburg & Xudong Hong, Saarland University, Visual Writing Prompts: Character-Grounded Story Generation with Curated Image Sequences.
- Katrin Erk, University of Texas at Austin, Description Systems and the Visual Genome
- Marcel Bollmann, Linköping University, NLP beyond English: Do we need to think more about linguistics?
- Christian Hardmeier, IT University of Copenhagen, *Understanding and Modelling Pronouns in Translation: Resources, Methods, Challenges and Insights.*
- Rolando Coto Solano, Dartmouth College, *Deep learning and severely under-resourced languages: How much can the model actually learn?*
- Tatjana Scheffler, Ruhr-University Bochum, Computational Linguistic Approaches to Digital Conversations: the Case of Intensifiers.
- Gijs Wijnholds, University of Utrecht, *Discontinuous Constituency and BERT: Case Studies of Dutch*.
- Sina Zarrieß, University of Bielefeld, *Linguistic Creativity and Computational Modeling of Language*.
- Djamé Seddah, Université Paris-Sorbonne (Paris 4), CamemBERT must die! (jk,lol) or Beyond Sesame street-based naming schemes: Camembert vs CharacterBert, a study on the performance robustness of large monolingual language models and their character-based counterparts.
- Jean-Philippe Bernardy, University of Gothenburg, *The Informative Speech Act: Linguistic Disambiguation on the basis of Epistemic Probability of Interpretations*.

5 PhD Program in Computational Linguistics

The PhD program continues to be a success, with most students presenting their work at international conferences. Two PhD students completed the program and obtained their degree in the past year:

- Bill Noble (started September 2018 & completed April 2023, first supervisor Staffan Larsson, second supervisor Asad Sayeed)
- Adam Ek (started March 2019 & completed September 2023, first supervisor Jean-Philippe Bernardy, second supervisor Stergios Chatzikyriakidis)

We currently have four remaining active PhD students, two of whom are expected to finish during 2024. Amandine Decker is taking a double degree with the University of Lorraine, France, and splits her time between the two hosts.

- Vidya Somashekarappa (started January 2019 expected to complete April 2024, first supervisor Asad Sayeed, second supervisor Chris Howes)
- Nikolai Ilinykh (started February 2020, first supervisor Simon Dobnik, second supervisor, Asad Sayeed)

- Alexander Berman (started October 2021, first supervisor Chris Howes, second supervisor Jean-Philippe Bernardy)
- Amandine Decker (started September 2022, joint supervisors Ellen Breitholz and Maxime Amblard, University of Lorraine, France)

The remaining students are:

- Axel Almquist (started January 2020, first supervisor Asad Sayeed, second supervisor Simon Dobnik, on indefinite leave of absence)
- Tewodros Gebreselassie (started January 2020, on indefinite leave of absence, first supervisor Simon Dobnik, second supervisor, Stergios Chatzikyriakidis)

6 Budget

Despite the increase in post pandemic travel, our budget continues to run a surplus. In this context, the two-year extension granted by the VR will help us to effectively utilize these funds. In addition to the extra postdoc positions planned, in terms of salary spending, we have welcomed a new system administrator, Kaj Ailomaa. Although his salary is at the moment funded by CLASP due to his main responsibilities being CLASP-related, including filling the gap left by Aram's departure, he is formally employed by FLoV to help supporting all of FLoV's needs. Beyond the CLASP period, we expect that future grant applications will include requests for adequate funding to cover system administration tasks. Kaj's role complements that of Robert Adesam, FLoV's only system administrator until now, with Robert focusing mainly on MLT-related tasks while Kaj provides support to CLASP members in various areas including server administration, setting up machine learning and data collection experiments, assisting with Furhat, managing data storage, and facilitating communication with central IT, among others.

7 Plans for 2024

Shalom Lappin continues to limit his role in the everyday coordination of CLASP activities following his health concerns. However, he continues to be associated to CLASP in its scientific activities.

7.1 Annual Conference and Workshops

The organization for the CLASP annual conference is underway with the topic *Multimodality and Interaction in Language Learning (MILLing)*. Milling will bring together researchers in from various areas to discuss learning through linguistic interaction, from the perspectives of both human language acquisition and machine learning. We hope to see innovative work that considers language learning from different perspectives, and we hope to cultivate a discussion that reaches across traditionally disparate disciplines. The final dates still need confirmation, but it will be in October 2024. We will be publishing the proceedings in the ACL Anthology directly as a CLASP conference.

A Publications, Talks and Other Outputs

Total Outputs by Publication Category:	
Thesis	2
Books	1
Refereed Journal Papers	7
Refereed Papers in Proceedings	16
Edited Collection or Proceedings	5
Talks	22
Conference Presentations,	
Non-archival Contributions and Others	13

o Alex Berman

Refereed Papers in Proceedings

Berman, A. (2023). Why does the AI say that I am too far away from the job market? In *Proceedings of the Weizenbaum Conference 2023: AI, Big Data, Social Media, and People on the Move.*

Talks

Berman, A. (2023a). AI-pionjären som blev AI-kritiker. General Public Lecture about Joseph Weizenbaum at International Science Festival Gothenburg.

Berman, A. (2023b). Can large language models explain interpretable models? Chalmers workshop: Interpretable approaches in human-machine interaction.

Berman, A. (2023c). Too far away from the job market – says who? Invited Talk at Chalmers AI Ethics seminar.

Conference Presentations, Non-archival Contributions and Others.

Berman, A., & Howes, C. (2023). Counterfactual reasoning capabilities of GPT: Preliminary findings. In *Proceedings of the 18th swecog conference*.

o Rasmus Blanck

Grants

Types, sets and probabilistic semantics (PI). Funded by the Swedish Research Council (VR 2023-00868). 2024–2026.

Other scientific activities

- Member of the local organising committee for Logic Colloquium 2024.
- Promotion to Docent.
- Referee for Theoretical Computer Science, Journal of Logic, Language and Information, Theoria and Bulletin of Symbolic Logic.

o Ellen Breitholtz

Refereed Journal Papers

Breitholtz, E., Howes, C., & Cooper, R. (2023). All the more reasons: Mismatches in topoi in dialogue. *Journal of Pragmatics*, 217, 172–184. doi:https://doi.org/10.1016/j.pragma.2023. 09.006

Refereed Papers in Proceedings

- Decker, A., Amblard, M., & Breitholtz, E. (2023). Analysing topic shifts in task-oriented dialogues. In *Actes des 5èmes journées du Groupement de Recherche CNRS « Linguistique Informatique, Formelle et de Terrain »* (pp. 48–54). Nancy, France.
- Howes, C., Breitholtz, E., & Maraev, V. (2023). Because is why: Children's acquisition of topoi through why questions. In *Proceedings of the 2023 CLASP Conference on Learning with Small Data (LSD)* (pp. 48–54). Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.clasp-1.5.pdf

Edited Proceedings

- Amblard, M., & Breitholtz, E. (Eds.). (2023). Proceedings of the 15th International Conference on Computational Semantics (IWCS).
- Breitholtz, E., Lappin, S., Loáiciga, S., Ilinykh, N., & Dobnik, S. (Eds.). (2023). Proceedings of the 2023 CLASP Conference on Learning with Small Data (LSD), Gothenburg, Sweden: Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.clasp-1.0

Talks

Breitholtz, E. (2023). Common sense reasoning in dialogue. Invited talk at The 31st Conference of the Student Organization of Linguistics in Europe (ConSole 31) Bielefeld University, 22-24th February.

Conference Presentations, Non-archival Contributions and Others

- Breitholtz, E., Maraev, V., & Howes, C. (2023). Deniable offenses different ways of communicating controversial messages. In *18th international pragmatics conference*. Retrieved from https://www.christinehowes.com/papers/breitholtz_undeniable_2023.pdf
- Breitholtz, E., & Sutton, P. (2023). You are how you reason: Personae as sets of topoi that explain the recovery of dogwhistled messages. Presented at Social Meaning Berlin 2023, November 14-15.
- Decker, A., Breitholtz, E., Howes, C., & Larsson, S. (2023). Topic and genre in dialogue. In *Proceedings of the 27th Workshop on the Semantics and Pragmatics of Dialogue Poster Abstracts*. Retrieved from http://semdial.org/anthology/Z23-Decker_semdial_0016.pdf
- Howes, C., Breitholtz, E., & Maraev, V. (2023). Not bloody funny: Rhetorical resources for laughter in interaction. In *18th International Pragmatics Conference*. Retrieved from https://www.christinehowes.com/papers/howes_not_2023.pdf
- Howes, C., Maraev, V., & Breitholtz, E. (2023a). Getting beyond a joke: Accommodation and mismatches in humour. In *The Semantics of Hidden Meanings: Workshop at the fourteenth International Tbilisi Symposium on Language, Logic and Computation (TbILLC 2023)*. Retrieved from https://www.christinehowes.com/papers/Howes.etal_SHiM_2023.pdf

- Howes, C., Maraev, V., & Breitholtz, E. (2023b). Menstruating vampires: What talk about taboos can tell us about dialogue. In *Proceedings of the 27th Workshop on the Semantics and Pragmatics of Dialogue Poster Abstracts*. Retrieved from http://semdial.org/anthology/Z23-Howes_semdial_0026.pdf
- Lindgren, E., Rönnerstrand, B., Ellen Breitholtz, R. C., Rettenegger, G., & Sayeed, A. (2023). Can politicians gain support from diverse voter groups by using racially loaded code words? An experimental study of the effects of anti-immigrant dogwhistles in Sweden. Presented by Asad Sayeed at Annual Conference of American Political Science Association, August 31 September 3.

Publication from 2022 too late to be included in last year's report

Noble, B., Maraev, V., & Breitholtz, E. (2022). Probabilistic pragmatics: A dialogical perspective. In J.-P. Bernardy, R. Blanck, S. Chatzikyriakidis, S. Lappin, & A. Maskharashvili (Eds.), *Probabilistic approaches to linguistic theory* (pp. 227–258). Stanford, California, USA: CSLI Publications.

Other scientific activites

- Co-chair of IWCS 2023, Nancy, France.
- Committee member at the PhD defence of David Pagmar, Department of Linguistics, Stockholm University.
- Promotion to Docent.

Project activities

• GRIPES, PI Asad Sayeed

Robin Cooper

Monograph

Cooper, R. (2023). From Perception to Communication: a Theory of Types for Action and Meaning. Open access: https://global.oup.com/academic/product/from-perception-to-communication-9780192871312. Oxford University Press.

Refereed Journal Papers

Breitholtz, E., Howes, C., & Cooper, R. (2023). All the more reasons: Mismatches in topoi in dialogue. *Journal of Pragmatics*, 217, 172–184. doi:https://doi.org/10.1016/j.pragma.2023. 09.006

Refereed Papers in Proceedings

Larsson, S., Cooper, R., Ginzburg, J., & Luecking, A. (2023). TTR at the SPA: Relating type-theoretical semantics to neural semantic pointers. In S. Chatzikyriakidis & V. de Paiva (Eds.), *Proceedings of the 4th Natural Logic Meets Machine Learning Workshop (NALOMA23)*, Association of Computational Linguistics. Retrieved from https://aclanthology.org/2023.naloma-1.pdf

Talks

Cooper, R. (2023). Belief states and belief reports. Invited talk at workshop for Aarne Ranta at Chalmers, 15th May.

Conference Presentations, Non-archival Contributions and Others

Larsson, S., Cooper, R., Ginzburg, J., & Luecking, A. (2023). Neural learning from small data using formal semantics. Presented at CLASP Conference on Learning with Small Data (LSD).

Publication from 2022 too late to be included in last year's report

Cooper, R., Ginzburg, J., & Larsson, S. (2022). Learning Language Games Probabilistically: From Crying to Compositionality. In J.-P. Bernardy, R. Blanck, S. Chatzikyriakidis, S. Lappin, & A. Maskharashvili (Eds.), *Probabilistic Approaches to Linguistic Theory*. CSLI Publications

Project Activity

GRIPES project (PI Asad Sayeed)

Joint Research

Collaboration with Stergios Chatzikyriakidis (University of Crete), Eleni Gregoromichelaki (FLoV) and Peter Sutton (Universitat Pompeu Fabra, Barcelona) on a short book *Theories of Types and the Structure of Meaning* to be published by Cambridge University Press as a Cambridge Element in Semantics in 2024.

Collaboration with Chris Eliasmith (University of Waterloo), Jonathan Ginzburg (Université Paris Cité), Staffan Larsson (CLASP/FLoV) and Catherine Pelachaud (CNRS) on a proposal submitted to ERC Synergy on Brain-Oriented Multimodal Embodied Language Learning in Interactive Social Settings. The proposed work includes an interpretation of TTR (a theory of types with records) in Eliasmith's SPA (semantic pointer architecture) providing a biologically plausible computational neural model.

o Amandine Decker

Refereed Papers in Proceedings

Decker, A., Amblard, M., & Breitholtz, E. (2023). Analysing topic shifts in task-oriented dialogues. In *Actes des 5èmes journées du Groupement de Recherche CNRS « Linguistique Informatique, Formelle et de Terrain »* (pp. 48–54). Nancy, France.

Conference Presentations, Non-archival Contributions and Others

Decker, A., Breitholtz, E., Howes, C., & Larsson, S. (2023). Topic and genre in dialogue. In *Proceedings of the 27th Workshop on the Semantics and Pragmatics of Dialogue - Poster Abstracts*. Retrieved from http://semdial.org/anthology/Z23-Decker_semdial_0016.pdf

In addition, Amandine has taken part in several popularization projects:

• Animation of a MATh.en.JEANS workshop within Edmond de Goncourt secondary school in Pulnoy, France.

- Introduction to research and computer science to high school students in the context of the "Chiche!" initiative (lycée Cormontaigne, Metz, France; lycée Jean-Victor Poncelet, Saint-Avold, France).
- Informal talks with high school students in the context of the first edition of the "Les cigognes" mathematics and computer science research retreat in the Grand-Est region, France.

o Simon Dobnik

Refereed Papers in Proceedings

- Dobnik, S., & Kelleher, J. D. (2023). On the role of resources in the age of large language models. In E. Breitholtz, S. Lappin, S. Loáiciga, N. Ilinykh, & S. Dobnik (Eds.), *Proceedings of the 2023 CLASP Conference on Learning with Small Data (LSD)* (pp. 191–197). Gothenburg, Sweden: Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.clasp-1.20/
- Ilinykh, N., & Dobnik, S. (2023a). Context matters: Evaluation of target and context features on variation of object naming. In P. Aggarwal, Ö. Alaçam, C. Silberer, S. Zarrieß, & T. Zesch (Eds.), *Proceedings of Linguistic Insights from and for Multimodal Language Processing (LIMO 2023) at KONVENS23* (pp. 1–13). Ingolstadt, Germany: KONVENS (Konferenz zur Verarbeitung natürlicher Sprache / Conference on Natural Language Processing). Retrieved from https://gup.ub.gu.se/publication/328940?lang=en
- Ilinykh, N., & Dobnik, S. (2023b). The VDG challenge: Response generation and evaluation in collaborative visual dialogue. In S. Mille (Ed.), *Proceedings of the 16th International Natural Language Generation Conference: Generation Challenges* (pp. 23–30). Prague, Czechia: Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.inlg-genchal.4
- Volodina, E., Dobnik, S., Lindström Tiedemann, T., & Vu, X.-S. (2023). Grandma Karl is 27 years old research agenda for pseudonymization of research data. In I. Varlamis & J. Gao (Eds.), Proceedings of the IEEE Ninth International Conference on Big Data Computing Service and Applications (BigDataService), special session on Big Data and Machine Learning with Privacy Enhancing Tech (pp. 229–233). The Institute of Electrical and Electronics Engineers, Inc. doi:10.1109/BigDataService58306.2023.00047
- Voloshina, E., Ilinykh, N., & Dobnik, S. (2023). Are language-and-vision transformers sensitive to discourse? a case study of ViLBERT. In A. Gatt, C. Gardent, L. Cripwell, A. Belz, C. Borg, A. Erdem, & E. Erdem (Eds.), *Proceedings of the Workshop on Multimodal, Multilingual Natural Language Generation and Multilingual WebNLG Challenge (MM-NLG 2023)* (pp. 28–38). Prague, Czech Republic: Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.mmnlg-1.4

Edited Proceedings

- Breitholtz, E., Lappin, S., Loáiciga, S., Ilinykh, N., & Dobnik, S. (Eds.). (2023). Proceedings of the 2023 CLASP Conference on Learning with Small Data (LSD), Gothenburg, Sweden: Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.clasp-1.0
- Ilinykh, N., Morger, F., Dannélls, D., Dobnik, S., Megyesi, B., & Nivre, J. (Eds.). (2023). Proceedings of the Second Workshop on Resources and Representations for Under-Resourced Languages and Domains (RESOURCEFUL-2023), Tórshavn, the Faroe Islands: Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.resourceful-1.0

Talks

- Dobnik, S. (2023a). Computational linguistics, language technology and AI. General Public Presentation at the Science Roulette (Vetenskapsrouletten). Gothenburg Science Festival, Gothenburg, Sweden. Retrieved from https://www.vetenskapsfestivalen.se
- Dobnik, S. (2023b). Quantum NLP, computational representations of meaning and challenges for the future. Talk at Quantum Natural Language Processing 2023, Compositional Models of Artificial Intelligence, and beyond! 16-17 May, Gothenburg, Sweden. Retrieved from https://qnlp.cambridgequantum.com/conf2023/

Conference Presentations, Non-archival Contributions and Others

- Dobnik, S. (2023). On the role of resources in the age of large language models. *Workshop on Resources and representations for under-resourced languages and domains at NoDaLiDa-2023*, 25. Retrieved from https://resourceful-workshop.github.io/resourceful-2023/papers. html
- Künkele, D., & Dobnik, S. (2023). Referring as a collaborative process: Learning to ground language through language games. In A. Lücking, C. Mazzocconi, & D. Verdonik (Eds.), *Proceedings of MariLogue Semdial 2023: The 27th Workshop on the Semantics and Pragmatics of Dialogue* (pp. 156–158). Maribor, Slovenia: University of Maribor, Faculty of Eelectrical Engineering and Computer Science. Retrieved from https://www.semdial.org/anthology/Z23-Kunkele_semdial_0020.pdf

Project Activity

- Mormor Karl / Grandma Karl is 27 years old: Automatic pseudonymization of research data, research environment (Contract No. VR 2022-02311), 2023–2028, PI Elena Volodina.
- "Beyond pixels and words: computational generation and understanding of spatial language in action" (Contract No. VR 2023-01552), 2024–2026, PI.
- EUTOPIA Integrated Connected Communities, CC1.1_GU Grounding Human-Centred AI on Embodied Multimodal Interaction, 2023–2025, Co-PI with Eleni Gregoromichelaki.
- Ethics for Research and Teaching in Natural Language Processing, development funds for 2023 from the council of vice-chancellors of Gothenburg, Lund, Stockholm, Umeå and Uppsala universities (SLUGU) with Beáta Megyesi (Uppsala and Stockholm University) and Hannah Devinney (Umeå University).

o Christine Howes

Refereed Journal Papers

- Breitholtz, E., Howes, C., & Cooper, R. (2023). All the more reasons: Mismatches in topoi in dialogue. *Journal of Pragmatics*, 217, 172–184. doi:https://doi.org/10.1016/j.pragma.2023. 09.006
- Healey, P. G., Howes, C., Kempson, R., Mills, G. J., Purver, M., Gregoromichelaki, E., ... Hough, J. (2023). "Who's there?": Depicting identity in interaction. (commentary on Clark and Fischer's "Social robots as depictions of social agents"). *Behavioral and Brain Sciences*. Retrieved from https://www.cambridge.org/core/journals/behavioral-and-brain-sciences/article/whos-there-depicting-identity-in-interaction/F46468A5765D5FCD1487238075E07A0B/share/a20fa7859485d8ef3f23d5bb207b40bdfaf5483e

Howes, C., & Lavelle, M. (2023). Quirky conversations: How people with a diagnosis of schizophrenia do dialogue differently. *Philosophical Transactions of the Royal Society B*. Retrieved from https://royalsocietypublishing.org/doi/10.1098/rstb.2021.0480

Refereed Papers in Proceedings

- Howes, C., Breitholtz, E., & Maraev, V. (2023). Because is why: Children's acquisition of topoi through why questions. In *Proceedings of the 2023 CLASP Conference on Learning with Small Data (LSD)* (pp. 48–54). Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.clasp-1.5.pdf
- Maraev, V., Mazzocconi, C., Howes, C., & Pelachaud, C. (2023). Towards investigating gaze and laughter coordination in socially interactive agents. In *Proceedings of the 11th International Conference on Human-Agent Interaction* (pp. 473–475). HAI '23. doi:10.1145/3623809. 3623968
- Somashekarappa, V., Sayeed, A., & Howes, C. (2023). Neural Network Implementation of Gaze-Target Prediction for Human-Robot Interaction. In *Proceedings of the 32nd IEEE International Conference on Robot and Human Interactive Communication*. Retrieved from https: //www.christinehowes.com/papers/Somashekarappa.etal_ROMAN_2023.pdf

Talks

- Howes, C. (2023a). Chat vs ChatGPT, or how i learned to stop worrying and love AI. General Public talk at Philosophical Society, Gothenburg, Sweden, October 21st.
- Howes, C. (2023b). Kids say the funniest things: Managing mismatches in dialogues with children. Talk at Pragmatics: Theory & Experiments group, University of Oslo, Norway, May 4th.
- Howes, C. (2023c). Making conversation: Managing mismatches in dialogue. Talk at Linguistics Group, University College London, UK, November 16th.
- Howes, C. (2023d). What about you? adaptable interactions with a person with schizophrenia. Talk at Theoretical and Experimental Linguistics group, University School for Advanced Studies, Pavia, Italy, May 22nd.

Conference Presentations, Non-archival Contributions and Others

- Berman, A., & Howes, C. (2023). Counterfactual reasoning capabilities of GPT: Preliminary findings. In *Proceedings of the 18th swecog conference*.
- Breitholtz, E., Maraev, V., & Howes, C. (2023). Deniable offenses different ways of communicating controversial messages. In *18th international pragmatics conference*. Retrieved from https://www.christinehowes.com/papers/breitholtz_undeniable_2023.pdf
- Decker, A., Breitholtz, E., Howes, C., & Larsson, S. (2023). Topic and genre in dialogue. In *Proceedings of the 27th Workshop on the Semantics and Pragmatics of Dialogue Poster Abstracts*. Retrieved from http://semdial.org/anthology/Z23-Decker_semdial_0016.pdf
- Howes, C., Breitholtz, E., & Maraev, V. (2023). Not bloody funny: Rhetorical resources for laughter in interaction. In *18th International Pragmatics Conference*. Retrieved from https://www.christinehowes.com/papers/howes_not_2023.pdf
- Howes, C., Healey, P. G. T., & Eshghi, A. (2023). Beyond repair: Dealing with divergence in dialogue. In *Workshop on (Mis)alignment in alignment research*, Aix, France. Retrieved from https://www.christinehowes.com/papers/Howes.etal_BeyondRepair_Misalignment2023.pdf

- Howes, C., Maraev, V., & Breitholtz, E. (2023a). Getting beyond a joke: Accommodation and mismatches in humour. In *The Semantics of Hidden Meanings: Workshop at the fourteenth International Tbilisi Symposium on Language, Logic and Computation (TbILLC 2023)*. Retrieved from https://www.christinehowes.com/papers/Howes.etal_SHiM_2023.pdf
- Howes, C., Maraev, V., & Breitholtz, E. (2023b). Menstruating vampires: What talk about taboos can tell us about dialogue. In *Proceedings of the 27th Workshop on the Semantics and Pragmatics of Dialogue Poster Abstracts*. Retrieved from http://semdial.org/anthology/Z23-Howes_semdial_0026.pdf
- Mazzocconi, C., Maraev, V., & Howes, C. (2023). Multimodal face-managing: Be polite by all means. In *Gespin 2023: 8th gesture and speech in interaction conference*. Retrieved from http://www.christinehowes.com/papers/Mazzocconi.etal_GeSpIn_2023.pdf
- Somashekarappa, V., Karimi, A., Howes, C., & Sayeed, A. (2023). What are they looking at? automatic simultaneous dyadic gaze detection from videos. In *Proceedings of the 44th Annual Meeting of the Cognitive Science Society- Poster Abstracts*. Retrieved from https://escholarship.org/uc/item/28w3j2rp

Project Activity

PI DivCon ERC Starting Grant 101077927 (from May 2023), with Vlad Maraev and Amy Han Qiu (post doc started in October 2023).

o Nikolai Ilinykh

Refereed Publications

- Ek, A., & Ilinykh, N. (2023). Vector norms as an approximation of syntactic complexity. In N. Ilinykh, F. Morger, D. Dannélls, S. Dobnik, B. Megyesi, & J. Nivre (Eds.), *Proceedings of the Second Workshop on Resources and Representations for Under-Resourced Languages and Domains (RESOURCEFUL-2023)* (pp. 121–131). Tórshavn, the Faroe Islands: Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.resourceful-1.15
- Ilinykh, N., & Dobnik, S. (2023a). Context matters: Evaluation of target and context features on variation of object naming. In P. Aggarwal, Ö. Alaçam, C. Silberer, S. Zarrieß, & T. Zesch (Eds.), *Proceedings of Linguistic Insights from and for Multimodal Language Processing (LIMO 2023) at KONVENS23* (pp. 1–13). Ingolstadt, Germany: KONVENS (Konferenz zur Verarbeitung natürlicher Sprache / Conference on Natural Language Processing). Retrieved from https://gup.ub.gu.se/publication/328940?lang=en
- Ilinykh, N., & Dobnik, S. (2023b). The VDG challenge: Response generation and evaluation in collaborative visual dialogue. In S. Mille (Ed.), *Proceedings of the 16th International Natural Language Generation Conference: Generation Challenges* (pp. 23–30). Prague, Czechia: Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.inlg-genchal.4
- Noble, B., & Ilinykh, N. (2023). Describe me an auklet: Generating grounded perceptual category descriptions. In H. Bouamor, J. Pino, & K. Bali (Eds.), *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing* (pp. 9330–9347). doi:10.18653/v1/2023.emnlp-main.580
- Voloshina, E., Ilinykh, N., & Dobnik, S. (2023). Are language-and-vision transformers sensitive to discourse? a case study of Vilbert. In A. Gatt, C. Gardent, L. Cripwell, A. Belz, C. Borg, A. Erdem, & E. Erdem (Eds.), Proceedings of the Workshop on Multimodal, Multilingual Natural Language Generation and Multilingual WebNLG Challenge (MM-NLG 2023)

(pp. 28–38). Prague, Czech Republic: Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.mmnlg-1.4

Edited Proceedings

- Breitholtz, E., Lappin, S., Loáiciga, S., Ilinykh, N., & Dobnik, S. (Eds.). (2023). Proceedings of the 2023 CLASP Conference on Learning with Small Data (LSD), Gothenburg, Sweden: Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.clasp-1.0
- Ilinykh, N., Morger, F., Dannélls, D., Dobnik, S., Megyesi, B., & Nivre, J. (Eds.). (2023). Proceedings of the Second Workshop on Resources and Representations for Under-Resourced Languages and Domains (RESOURCEFUL-2023), Tórshavn, the Faroe Islands: Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.resourceful-1.0

Talks

- Ilinykh, N. (2023a). Bridging the gap between language models and the world: Studies on natural language processing and computer vision. Talk at MIRAI 2.0 R&I Week 2023, Umeå University, November 13th.
- Ilinykh, N. (2023b). Chatgpt goes into the physical world: On dangers and future of multi-modal language. Talk at Who's Responsible for ChatGPT?, Online, August 4th.

o Aram Karimi

Conference Presentations, Non-archival Contributions and Others

Somashekarappa, V., Karimi, A., Howes, C., & Sayeed, A. (2023). What are they looking at? automatic simultaneous dyadic gaze detection from videos. In *Proceedings of the 44th Annual Meeting of the Cognitive Science Society- Poster Abstracts*. Retrieved from https://escholarship.org/uc/item/28w3j2rp

Shalom Lappin

Refereed Journal Article

Lappin, S. (2023). Assessing the strengths and weaknesses of large language models. *Journal of Logic, Language and Information*, 1–12. doi:10.1007/s10849-023-09409-x

Talks

- Lappin, S. (2023a). Assessing the strengths and weaknesses of large language models. Invited talk at Learning with Small Data, CLASP Annual Conference, September 12.
- Lappin, S. (2023b). The strengths and weaknesses of large language models. Invited talk at the School of Electronic Engineering and Computer Science, Queen Mary University of London, June 21.

o Staffan Larsson

Refereed Papers in Proceedings

Larsson, S., Cooper, R., Ginzburg, J., & Luecking, A. (2023). TTR at the SPA: Relating type-theoretical semantics to neural semantic pointers. In S. Chatzikyriakidis & V. de Paiva (Eds.), *Proceedings of the 4th Natural Logic Meets Machine Learning Workshop (NALOMA23)*, Association of Computational Linguistics. Retrieved from https://aclanthology.org/2023. naloma-1.pdf

Talks

Larsson, S. (2023). Hur blir språket? Public talk at Frihamnsdagarna Pop-up.

Conference Presentations, Non-archival Contributions and Others

Decker, A., Breitholtz, E., Howes, C., & Larsson, S. (2023). Topic and genre in dialogue. In *Proceedings of the 27th Workshop on the Semantics and Pragmatics of Dialogue - Poster Abstracts*. Retrieved from http://semdial.org/anthology/Z23-Decker_semdial_0016.pdf

Larsson, S. Cooper, R. Ginzburg, L. & Luecking, A. (2023). Neural learning from small data us-

Larsson, S., Cooper, R., Ginzburg, J., & Luecking, A. (2023). Neural learning from small data using formal semantics. Presented at CLASP Conference on Learning with Small Data (LSD).

Publication from 2022 too late to be included in last year's report

Cooper, R., Ginzburg, J., & Larsson, S. (2022). Learning Language Games Probabilistically: From Crying to Compositionality. In J.-P. Bernardy, R. Blanck, S. Chatzikyriakidis, S. Lappin, & A. Maskharashvili (Eds.), *Probabilistic Approaches to Linguistic Theory*. CSLI Publications.

Project Activity

Not Just Semantics project (PI) with Jenny Myrendal, Vlad Maraev.

Joint Research

Collaboration with Aina Gari Soler, Chloé Clavel and Matthieu Labeau at Telecom Paris, France, in connection to the Not Just Semantics project. A joint conference contribution/article is planned for 2024 on methods and corpora for studying word meaning negotiations in spoken and written dialogue.

Collaboration with Chris Eliasmith (University of Waterloo), Jonathan Ginzburg (Université Paris Cité), Robin Cooper (CLASP/FLoV) and Catherine Pelachaud (CNRS) on a proposal submitted to ERC Synergy on Brain-Oriented Multimodal Embodied Language Learning in Interactive Social Settings. The proposed work includes an interpretation of TTR (a theory of types with records) in Eliasmith's SPA (semantic pointer architecture) providing a biologically plausible computational neural model.

Guest lectures

MA/PhD Course on Dialogue Systems at Pompeu Fabra University, Barcelona, Spain, 27-29 March. Invited by Prof. Nuria Bel. Funded by Erasmus+ Teacher Mobility programme.

o Sharid Loáiciga

Refereed Papers in Proceedings

Hong, X., Loáiciga, S., & Sayeed, A. (2023). A surprisal oracle for active curriculum language modeling. In A. Warstadt, A. Mueller, L. Choshen, E. Wilcox, C. Zhuang, J. Ciro, ... R. Cotterell (Eds.), Proceedings of the BabyLM Challenge at the 27th Conference on Computational Natural Language Learning (pp. 259–268). doi:10.18653/v1/2023.conll-babylm.22

Edited Proceedings

- Breitholtz, E., Lappin, S., Loáiciga, S., Ilinykh, N., & Dobnik, S. (Eds.). (2023). Proceedings of the 2023 CLASP Conference on Learning with Small Data (LSD), Gothenburg, Sweden: Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.clasp-1.0
- Strube, M., Braud, C., Hardmeier, C., Li, J. J., Loáiciga, S., & Zeldes, A. (Eds.). (2023). Proceedings of the 4th Workshop on Computational Approaches to Discourse (CODI 2023), Toronto, Canada: Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.codi-1.0

Invited Talks

Loáiciga, S. (2023). Keeping reference in pre-trained language models and multimodal corpora. Invited Talk at Department of Language Science & Technology, Saarland University, November 16th.

o Vladislav Maraev

Referred Journal Papers

Förster, F., Romeo, M., Holthaus, P., Wood, L. J., Dondrup, C., Fischer, J. E., ... Kapetanios, E. (2023). Working with troubles and failures in conversation between humans and robots: Workshop report. *Frontiers in Robotics and AI*, 10. doi:10.3389/frobt.2023.1202306

Refereed Papers in Proceedings

- Howes, C., Breitholtz, E., & Maraev, V. (2023). Because is why: Children's acquisition of topoi through why questions. In *Proceedings of the 2023 CLASP Conference on Learning with Small Data (LSD)* (pp. 48–54). Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.clasp-1.5.pdf
- Maraev, V., Mazzocconi, C., Howes, C., & Pelachaud, C. (2023). Towards investigating gaze and laughter coordination in socially interactive agents. In *Proceedings of the 11th International Conference on Human-Agent Interaction* (pp. 473–475). HAI '23. doi:10.1145/3623809. 3623968

Conference Presentations, Non-archival Contributions and Others

Breitholtz, E., Maraev, V., & Howes, C. (2023). Deniable offenses - different ways of communicating controversial messages. In *18th international pragmatics conference*. Retrieved from https://www.christinehowes.com/papers/breitholtz_undeniable_2023.pdf

- Howes, C., Breitholtz, E., & Maraev, V. (2023). Not bloody funny: Rhetorical resources for laughter in interaction. In *18th International Pragmatics Conference*. Retrieved from https://www.christinehowes.com/papers/howes_not_2023.pdf
- Howes, C., Maraev, V., & Breitholtz, E. (2023a). Getting beyond a joke: Accommodation and mismatches in humour. In *The Semantics of Hidden Meanings: Workshop at the fourteenth International Tbilisi Symposium on Language, Logic and Computation (TbILLC 2023)*. Retrieved from https://www.christinehowes.com/papers/Howes.etal_SHiM_2023.pdf
- Howes, C., Maraev, V., & Breitholtz, E. (2023b). Menstruating vampires: What talk about taboos can tell us about dialogue. In *Proceedings of the 27th Workshop on the Semantics and Pragmatics of Dialogue Poster Abstracts*. Retrieved from http://semdial.org/anthology/Z23-Howes semdial 0026.pdf
- Mazzocconi, C., Maraev, V., & Howes, C. (2023). Multimodal face-managing: Be polite by all means. In *Gespin 2023: 8th gesture and speech in interaction conference*. Retrieved from http://www.christinehowes.com/papers/Mazzocconi.etal_GeSpIn_2023.pdf

Publication from 2022 too late to be included in last year's report

Noble, B., Maraev, V., & Breitholtz, E. (2022). Probabilistic pragmatics: A dialogical perspective. In J.-P. Bernardy, R. Blanck, S. Chatzikyriakidis, S. Lappin, & A. Maskharashvili (Eds.), *Probabilistic approaches to linguistic theory* (pp. 227–258). Stanford, California, USA: CSLI Publications.

Grants

VR (Swedish Research Council) international postdoc grant 2023-00358, SocLaVA Social laughter for virtual agents (2023, 3600000 SEK)

Project Activity

- SocLaVA VR international postdoc grant 2023-00358 (started in December 2023)
- DivCon ERC Starting Grant 101077927, with Chris Howes (PI) and Amy Han Qiu.
- Not Just Semantics VR project with Staffan Larsson (PI) and Jenny Myrendal.

o Bill Noble

Refereed Papers in Proceedings

Noble, B., & Ilinykh, N. (2023). Describe me an auklet: Generating grounded perceptual category descriptions. In H. Bouamor, J. Pino, & K. Bali (Eds.), *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing* (pp. 9330–9347). doi:10.18653/v1/2023.emnlp-main.580

Talks

- Noble, B. (2023). Describe me an auklet: Generating grounded perceptual category descriptions. Talk at Chalmers, DSAI Seminar, November 21st.
- Noble, B., & Clarke, B. (2023). "...what does 'wtf' mean is it an astronomical term?" meaning negotiation in online citizen science discussion forums. Talk at University of Gothenburg, Communications Research Seminar, November 27.

Tahmesebi, N., Noble, B., Cassotti, P., Periti, F., Virk, S. M., & Sköldberg, E. (2023). Ongoing research in the Change is Key! program. Talk at University of Gothenburg, CLASP Seminar series, November 1st.

Publication from 2022 too late to be included in last year's report

Noble, B., Maraev, V., & Breitholtz, E. (2022). Probabilistic pragmatics: A dialogical perspective. In J.-P. Bernardy, R. Blanck, S. Chatzikyriakidis, S. Lappin, & A. Maskharashvili (Eds.), *Probabilistic approaches to linguistic theory* (pp. 227–258). Stanford, California, USA: CSLI Publications.

Asad Sayeed

Refereed Journal Papers

Hong, X., Sayeed, A., Mehra, K., Demberg, V., & Schiele, B. (2023). Visual Writing Prompts: Character-Grounded Story Generation with Curated Image Sequences. *Transactions of the Association for Computational Linguistics*, 11, 565–581. doi:10.1162/tacl_a_00553. eprint: https://direct.mit.edu/tacl/article-pdf/doi/10.1162/tacl_a_00553/2134487/tacl_a_00553. pdf

Refereed Papers in Proceedings

- Boholm, M., & Sayeed, A. (2023). Political dogwhistles and community divergence in semantic change. In N. Tahmasebi, S. Montariol, H. Dubossarsky, A. Kutuzov, S. Hengchen, D. Alfter, ... P. Cassotti (Eds.), *Proceedings of the 4th Workshop on Computational Approaches to Historical Language Change* (pp. 53–65). doi:10.18653/v1/2023.lchange-1.6
- Hong, X., Demberg, V., Sayeed, A., Zheng, Q., & Schiele, B. (2023). Visual coherence loss for coherent and visually grounded story generation. In A. Rogers, J. Boyd-Graber, & N. Okazaki (Eds.), Findings of the association for computational linguistics: Acl 2023 (pp. 9456–9470). doi:10.18653/v1/2023.findings-acl.603
- Hong, X., Loáiciga, S., & Sayeed, A. (2023). A surprisal oracle for active curriculum language modeling. In A. Warstadt, A. Mueller, L. Choshen, E. Wilcox, C. Zhuang, J. Ciro, ... R. Cotterell (Eds.), *Proceedings of the BabyLM Challenge at the 27th Conference on Computational Natural Language Learning* (pp. 259–268). doi:10.18653/v1/2023.conll-babylm.22
- Hong, X., Mehra, K., Sayeed, A., & Demberg, V. (2023). Visually grounded story generation challenge. In S. Mille (Ed.), *Proceedings of the 16th international natural language generation conference: Generation challenges* (pp. 17–22). Prague, Czechia: Association for Computational Linguistics. Retrieved from https://aclanthology.org/2023.inlg-genchal.3
- Somashekarappa, V., Sayeed, A., & Howes, C. (2023). Neural Network Implementation of Gaze-Target Prediction for Human-Robot Interaction. In *Proceedings of the 32nd IEEE International Conference on Robot and Human Interactive Communication*. Retrieved from https: //www.christinehowes.com/papers/Somashekarappa.etal_ROMAN_2023.pdf

Conference Presentations, Non-archival Contributions and Others

Lindgren, E., Rönnerstrand, B., Ellen Breitholtz, R. C., Rettenegger, G., & Sayeed, A. (2023). Can politicians gain support from diverse voter groups by using racially loaded code words? An experimental study of the effects of anti-immigrant dogwhistles in Sweden. Presented by Asad Sayeed at Annual Conference of American Political Science Association, August 31 – September 3.

Somashekarappa, V., Karimi, A., Howes, C., & Sayeed, A. (2023). What are they looking at? automatic simultaneous dyadic gaze detection from videos. In *Proceedings of the 44th Annual Meeting of the Cognitive Science Society- Poster Abstracts*. Retrieved from https://escholarship.org/uc/item/28w3j2rp

Vidya Somashekarappa

Refereed Papers in Proceedings

Somashekarappa, V., Sayeed, A., & Howes, C. (2023). Neural Network Implementation of Gaze-Target Prediction for Human-Robot Interaction. In *Proceedings of the 32nd IEEE International Conference on Robot and Human Interactive Communication*. Retrieved from https: //www.christinehowes.com/papers/Somashekarappa.etal_ROMAN_2023.pdf

Conference Presentations, Non-archival Contributions and Others

- Somashekarappa, V. (2023). Gaze-target prediction and generation in a natural dialogue setting. The 24th Nordic Conference on Computational Linguistics.
- Somashekarappa, V., Karimi, A., Howes, C., & Sayeed, A. (2023). What are they looking at? automatic simultaneous dyadic gaze detection from videos. In *Proceedings of the 44th Annual Meeting of the Cognitive Science Society- Poster Abstracts*. Retrieved from https://escholarship.org/uc/item/28w3j2rp