

Doktorandfest 2019

Book of Abstracts

Department of Linguistics
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Session 1

Whoever has, to him more shall be given

Signe Tonér
General Linguistics

13:30pm
13:45pm

”Swedish preschool is considered to be of high quality. However, recent studies and audits have indicated that Swedish preschool lacks in equity (e.g. Skolinspektionen, 2018). We investigated potential effects of two pedagogical interventions compared to business-as-usual on an array of cognitive skills in 431 preschoolers aged 4-6 (Gerholm et al., 2018). Intervention groups did not show larger gains than controls. Children who took part in attention-enhancing exercises showed some improvement in auditory selective attention as measured via an ERP paradigm, but the effect was not significant. Socioeconomic status and preschool quality was significantly higher in controls than in intervention groups.

References

(Gerholm et al., 2018). A protocol for a three-arm cluster randomized controlled superiority trial investigating the effects of two pedagogical methodologies in Swedish preschool settings on language and communication, executive functions, auditive selective attention, socioemotional skills and early maths skills. *BMC Psychology* (Gerholm et al., 2019). A randomized controlled trial to examine the effect of two teaching methods on preschool childrens language and communication, executive functions, socioemotional comprehension, and early math skills. Manuscript submitted for publication.

Skolinspektionen. (2018). Förskolans kvalitet och måluppfyllelse.

Building Models of Pragmatic Development - a mid-way discussion

David Pagmar
General Linguistics

13:45pm
14:00pm

The development of pragmatic abilities (e.g. turn-taking, certainty/evidentiality, organisation of utterances) is often assumed to be related to the development of other linguistic, social, and cognitive abilities (Matthews, 2014). Still, there is little known about the inner workings of this relationship. The aim of this talk is to discuss the construction of models out of a battery of development measurements and test results, and to evaluate how well different models could explain specific

pragmatic abilities of Swedish speaking 5-year-olds. The test results included linguistic variables (e.g. SECDI, PPVT, prepositions), extra-linguistic variables (e.g. deictic gaze, facial expression), social variables (e.g. imitation, conventional play), and meta data (e.g. parents level of education, household income). The models will be evaluated through a widely applicable information criteria (WAIC) analysis. A WAIC analysis shows how well one model predicts new observations compared to another model. The analysis will be presented in closer detail.

References

Matthews, D. (Ed.). (2014). Pragmatic development in first language acquisition (Vol. 10). John Benjamins Publishing Company.

A multidimensional study of sub-phonemic variation in child speech

14:00pm
14:15pm

Carla Wikse Barrow

Phonetics

Covert contrast denotes when children produce a fine but measurable contrast between speech sounds that are transcribed with the same phonetic symbol, i.e. perceptually neutralized (see e.g. Munson, Edwards, Schelling, Beckman & Meyer, 2010). The existence of covert contrast supports the view that childrens phonological acquisition is gradual and has implications on how we describe and classify speech sound errors in childrens speech. The presentation will provide a short background, a description of three of the studies that will be included in my thesis and their possible contributions to the scientific literature and clinical speech-language pathology practice.

Session 2

Articulation rate and entropy in child-directed speech

14:40pm

14:55pm

Johan Sjons

Computational Linguistics

It is not known whether the input data to the child acquiring language must be presented to her at a certain rate in order for this process to take place. In my thesis, I try to lay the groundwork for an approach to this problem. I do this by investigating whether and if so how articulation rate in child-directed speech changes as a function of child age, which includes taking into account various confounds, such as utterance length and entropy. Results show that there is a positive correlation between articulation rate in child-directed speech and child age, even when confounds are controlled for.

Aligning Embedding Spaces below Word Level

14:55pm

15:10pm

Murathan Kurfah

Computational Linguistics

Aligning the representation of words from different languages into a common vector space has quickly become a significant challenge in NLP (Ruder et al., 2017). Typically, existing works achieve this alignment via a linear transformation matrix obtained by using a small bilingual lexicon consisting of different word forms. However, agglutinative languages pose a challenge as their rich morphology leads sparsity problem. The current study aims to align these vector spaces on morpheme level, rather than word level, expecting to obtain cross lingual representations of subword units which can be combined to cover the lexicon of the target languages.

References

Ruder, S., Vulić, I., & Søgaard, A. (2017). A survey of cross-lingual word embedding models. arXiv preprint arXiv:1706.04902.

Analysis of phonetic-acoustic parameters in identical twins: Implications for forensic speaker comparison in Brazilian Portuguese

15:10pm
15:25pm

Julio Cesar Cavalcanti
Phonetics

This research aims at analyzing what phonetic-acoustic parameters can contribute to the forensic speaker comparison task with identical Brazilian Portuguese speakers. Semi-spontaneous speech samples were recorded in a methodological design that resembles a forensic context. 24 identical male twins, aging 18-45 years old were recruited. The corpus comprises three types of data: telephone conversation, interview and reading. Parameters related to vocal quality as well as those related to the speech temporal patterns will be considered for the analysis. It is assumed that those measurements that are consistent regarding the FSC task with identical twins might be considered notably robust.

Does sign language proficiency affect children's spelling?

15:25pm
15:40pm

Moa Gärdenfors
Sign Language

Children with hearing loss do different kinds of spelling mistakes compared to normal-hearing children (Alamargot et al. 2007). However, it is still unclear if sign language proficiency may affect their written language performance. In this study, the spelling skills of thirty-three signing (Swedish sign language) and non-signing children were examined. A keystroke tool logged their writing process and we could see that the letter substitutions increased when the children had a functional hearing, and so did the morphological errors when they mastered sign language, regardless degree of hearing. **References**
Alamargot, D et al. (2007). Text composition by deaf and hearing middle-school students: The role of working memory. *Reading and Writing*. 20:4. 333360

Session 3

The Cross-Linguistic Encoding of Cognition

16:00pm

16:15pm

Anna Sjöberg

General Linguistics

In this presentation I give an overview of my project and give a report of some results from my pilot study on European languages. The goal of my thesis is a typology of the linguistic expression of cognition, primarily as encoded in such verbs as Eng. think, know or Swe. veta, tycka using on one hand Bible translations (for a large-scale picture) and on the other elicitation (for a more detailed view in fewer languages). The results of the pilot include e.g. an almost consistent division between knowing-that and knowing-someone and a lack of co-lexification between the knowing- and thinking-domains.

Cherry picking in Saepmie

16:15pm

16:30pm

Richard Kowalik

General Linguistics

South Saami syntax appears many times to be quite Standard Average European, and the long language contact with Scandinavian languages has left its marks on the language both in form of loan words and constructions. In this talk however, I am focusing on features that make South Saami different and interesting and which are less typical for the contact languages. The rather biased and slightly exotifying pick of features includes a logophoric pronoun, a relational suffix, a negative suffix, copular-free clauses and interrogative markers.

16:30pm
16:45pm

Location and position in Kogi

Dominique Knuchel

General Linguistics

Visiting PhD student from the Bern University

The talk discusses the expression of location and position in Kogi (Chibchan; Colombia) in basic locative constructions, i.e. constructions used in answering "where"-questions (Levinson Wilkins 2006). It will be shown that topological relations are expressed through two locative case suffixes and further specified by postpositions or relational nouns. Moreover, a glimpse into the intricate system of positional verbs will be provided. These encode the posture (e.g. lying vs. standing), or physical properties of objects (e.g. 2D vs. 3D) and a subset of them can be derived with two verbal prefixes which denote the notions on and inside.

References

Levinson, Stephen C., and David P. Wilkins (eds.). 2006. *Grammars of space: Explorations in cognitive diversity*. Cambridge University Press.
