

Thursday Interdisciplinary Colloquium
Winter 2019-Spring 2019
Thursdays, 16:00-17:30, Webb 103

30.04.19

Moshe Bar Lev

École Normale Supérieure, Paris

Homogeneity and the Distributive-Collective Distinction

This talk focuses on two questions in the semantics of plural predication:

- (1) Does plural predication give rise to 'specified' (i.e., distributive or collective) meanings or to 'underspecified' ones (compatible with both distributive and collective situations)?
- (2) What is the source of variation between non-distributive predicates with respect to Homogeneity (Križ, 2015)?

Examining question (1), I argue that both specified and underspecified meanings should be derivable (following Schwarzschild, 1991; Heim, 1994), and observe that predicates differ in their Specification properties (whether they give rise to specified or underspecified meanings). I further claim that there is a correlation between the Specification properties of predicates and their Homogeneity properties, which calls for a unified perspective on questions (1)-(2). I propose such a perspective based on a novel trivalent semantics for Link's star operator (following but departing from Schwarzschild, 1994) together with a relativization of that operator to 'covers' (Schwarzschild, 1991, 1994; Heim, 1994).

11.04.19

Yoav Goldberg

Bar-Ilan University

Hierarchical Processing with Sequential Models?

Neural network ("deep learning") models are taking over machine learning approaches for language by storm. In particular, recurrent neural networks (RNNs), which are flexible non-markovian models of sequential data, were shown to be effective for a variety of language processing tasks. Somewhat surprisingly, these seemingly purely sequential models are very capable at modeling various syntactic phenomena, and using them result in very strong language processing models, including syntactic parsers for a variety of languages. As an NLP researcher, my research agenda has been transformed by recurrent neural networks. However, little is known about their formal capabilities to process natural language, and the way in which language knowledge is encoded in the models.

In this talk, I will briefly describe recurrent-networks, and present empirical evidence for their capabilities of learning the subject-verb agreement

relation in naturally-occurring text, from relatively indirect supervision. This part is based on my joint work with Tal Linzen and Emmanuel Dupoux. I will also briefly touch on extensions to that work (based on joint work with Shauli Ravfogel, as well as other related works). Time permitting, I will present a model that uses RNNs for (dependency-based) syntactic parsing (based on my joint work with Eli Kiperwasser).

Results like these and similar ones highlight interesting questions regarding the need for explicit encoding of hierarchy in mechanisms for processing "real world" natural language texts.

04.04.19

Bridget Schvarcz

Bar-Ilan University

***Countability Expressions in Hungarian:
Can Classifiers and a Mass-Count Distinction Coexist?***

Hungarian provides evidence that there is considerably more typological variation in expressions of the mass/count distinction and countability than has often been suggested, and shows that the functional category of classifiers and a grammatical mass/count can co-occur. It further provides insight into possible constraints into which nouns can be used as classifiers, and what the semantic operations are which shift nouns into classifiers.

In this talk, I argue three major points:

- (i) There is considerably more evidence that Hungarian has a genuine mass/count distinction than originally suggested in Schvarcz and Rothstein (2017). Hungarian has purely mass nouns, purely count nouns and a wide range of flexible nouns that can occur in both mass and count contexts.
- (ii) However, unlike what e.g. Chierchia (1998, 2010) proposes, Hungarian, though a mass/count language, allows individual level sortal classifiers. The received wisdom is that languages with a mass/count distinction do not have a functional category of 'classifier', but derive classifiers, when necessary, from count nouns. Hungarian has both types.
- (iii) The Hungarian classifiers can be divided into functional heads (1), analogous to the sortal classifiers we find in Mandarin, and sortal classifiers derived from purely count nouns that never appear in mass contexts (2).

(1) *húsz tő szőlő*
twenty CL_{root} grape
'twenty roots of grape'

(2) *két bokor fekete ribizli*
two CL_{bush} blackcurrant
'two bushes of blackberries'

While container nouns like, *pohár* ('glass') shift easily from a sortal to a relational reading (3a), a general process allowing sortals to shift to relational nouns, easily available in English, does not seem to be available

in Hungarian (3b). Nouns like *könyv* ('book') can be used as classifiers only after having undergone *-nyi* suffixation.

- (3) a. *egy pohár bor* b. **egy könyv vers* c. *egy könyv-nyi vers*
one glass wine one book poem one book- NYI poem
'a glass of wine' 'a book of poems' 'a book of poems'

The talk will present a semantic analysis of classifiers in the framework of Khrizman et al (2015) showing the differences between functional and lexically based classifiers.

The Hungarian paradigm suggests that a division into mass/count vs. classifier languages (Chierchia, 1998, 2010) is too simple, and that a more nuanced account of variation in systems is required.

28.03.19

Noa Peled

Tel Aviv University

Representation and Learning of Quantificational Determiners

Quantificational determiners (Q-dets; e.g., 'every', 'some', 'five' in English) pose a representational challenge for the linguist, and a learning challenge for the child. We discuss these challenges, using semantic automata (SA; van Benthem, 1986) as a concrete representation of reference, and provide a learner that induces appropriate Q-det denotations, based on the principle of Minimum Description Length (MDL; Rissanen, 1978). Moreover, we note a way in which this response to the learning challenge allows us to probe the representational challenge: While SA and a competing representational framework that we refer to as building blocks (BB, where the denotations of Q-dets are represented using a set of primitive determiners and their combinations; cf. Keenan and Stavi, 1986) often make similar predictions about adult judgments, they make divergent predictions about the course of acquisition. We evaluate these predictions in view of recent experimental work by Chemla et al (2018) and find a tentative argument in favor of BB and against SA.

14.03.19

David Erschler

Ben-Gurion University

On Timing of Ellipsis: Evidence from Parasitic Deletion Processes

In current derivational approaches to ellipsis, it is fairly standard to assume that ellipsis is licensed in narrow syntax and targets constituents, while actual deletion of structure occurs at the PF, that is, the post-syntactic stage of derivation (Chomsky, 1995; Merchant, 2001; Aelbrecht, 2010; Lipták & Griffiths, 2014; Weir, 2014; Thoms, 2015; Abe, 2015; Ott & Struckmeier, 2018). With an increasingly complex picture of post-syntactic derivation emerging (Arregi & Nevins, 2012, and references there), it

makes sense to try and find the appropriate ordering of deletion with respect to these other post-syntactic rules.

An (2016) has recently shown that deletion can reach into the material adjacent to the ellipsis site and, as an effect of this, delete a fragment of the sentence that does not form a syntactic constituent. He called such a phenomenon *parasitic deletion*. Specifically, he addressed fragment answer formation in Korean.

In this talk, I will introduce a hitherto undescribed ellipsis variety I have found so far in a number of head-final languages, including Eastern Armenian, Digor and Iron Ossetic, and Turkish. I will argue that this ellipsis variety also involves *parasitic deletion* rather than mere deletion of a constituent. I will proceed to argue that the existence of *parasitic deletion* allows us to more precisely pinpoint the ordering of deletion among the various Phonological Form rules. Specifically, deletion must occur after linearization, and target contiguous strings.

07.03.19

Renate Raffelsiefen

Institute for German Language, Mannheim

Allomorphy and Abstractness: Empirical Considerations

The original concept of allomorphy envisioned by Structuralists was based on phonemic distinctness, resulting in the assumption of separate allomorphs also in cases of highly regular alternations. Rejecting a phonemic level of representation altogether, Generativists abandoned this approach, focusing their efforts on minimizing allomorphy by way of deriving surface variants from a single underlying representation whenever they saw grounds for motivating relevant rules. That approach has been deemed superior not only because of yielding a more parsimonious lexicon, but also because of not being plagued by missed generalizations due to non-mentioning of the rules in question.

In my presentation I will, however, take issue with this view and argue for the original approach to allomorphy based on phonemic distinctness. The arguments concern generalizations which require reference specifically to the phonemic level of abstractness, including the following:

- Phonological optimization as a conditioning factor for stable allomorphy in affixes or function words, both in "regular" and in "suppletive" cases;
- Syncretism patterns;
- Iconicity (correlations between morphological and phonological markedness in stem allomorphy);
- Systematic loss of stem allomorphs (due to violation of some phonological markedness constraint)

28.02.19

Rama Novogrodsky

University of Haifa

***The Interface between Syntax and Theory of Mind
in Pronoun Use of Children with Autism***

Children with High Functioning Autism (HFA) show deficit in linguistic abilities involving perspective-taking and pragmatic judgments (Baron-Cohen, Leslie, & Frith, 1985). In line with this assumption, many studies showed a relationship between deficit in pronoun production and deficit in Theory-of-Mind capacity among children with autism (e.g., Fay, 1979; Hale & Tager-Flusberg, 2005; Novogrodsky, 2013; Rumpf, Kamp-Becker, Becker, & Kauschke, 2012). In this talk I will present findings from a sentence elicitation task of children with HFA. Based on syntactic measures, Theory-of-Mind scores and type of errors in the pronoun elicitation task, the syntactic deficit in children with HFA disorder will be discussed.