

Thursday Interdisciplinary Colloquium
Winter 2017-Spring 2017
Thursdays, 16:00-17:30, Webb 103

29.06.17

Ezer Rasin

MIT

An Argument for Severing Stress from Phonology

According to the consensus view in generative linguistics, multiple phonological computations, including the computation of word stress, tone, and segmental processes, are carried out in a single cognitive module known as 'phonology'. I present an argument for a modular decomposition of phonology, where the computation of stress is carried out in a separate module with a limited interaction with the rest of phonology.

The argument is based on what I refer to as the Stress-Encapsulation Universal. Drawing on observations by de Lacy (2006) and Blumenfeld (2006), I propose a universal asymmetry between stress and segmental processes. Segmental processes are often sensitive to the position of stress: in American English, for example, [t] is flapped between a preceding stressed vowel and a following unstressed vowel, as in *polítical* vs. *polítician*; but the computation of stress is never directly sensitive to segmental information: stress patterns like 'stress the rightmost vowel followed by a velar' are unattested. The unattested patterns can be excluded in the modular architecture if the input to the stress module excludes representations of segmental features.

I will discuss the nature of the interaction between the stress module and the rest of phonology and will compare the predictions of the modular architecture to the predictions of non-modular accounts of encapsulation within serial or parallel architectures.

22.06.17

Noa Bassel

Tel Aviv University

Reflexive PPs

Dominant syntactic approaches to anaphor distribution are either pronominal-based (Chomsky 1981, 1986) or predicate-based (Reinhart & Reuland 1993, Pollard & Sag 1992). In this work I argue in favor of an event-based binding system. I take Reflexivity Theory (Reinhart & Reuland 1993) as a starting point, and show that rephrasing it in terms of events rather than predicates yields better predictions for the distribution of reflexive anaphors across PPs of spatial relations in Hebrew and English.

I rely on the distinction between syntactic anaphors and discursive anaphors, which are predicted by Reflexivity framework to be found in complementary distribution: syntactic anaphors in argument positions of reflexive predicates, discursive anaphors elsewhere. Hebrew PP-anaphors fail both predictions, in that they do not enable discursive anaphors where they should be available, but then they do not block syntactic anaphors where they are predicted to be blocked.

I show that while discursive anaphors of the logophoric type are not attested in Hebrew PPs, the licensing of syntactic anaphors in these environments is related to event structure such that simple events (states and activities) enable PP-anaphors across the board, and complex events block unless the PP modifies the sub-event that contains its antecedent. This is true whether the PPs are arguments or adjuncts, contra Reinhart and Reuland's generalization that syntactic anaphors are restricted to argument positions.

Chomsky, N. (1981). *Lectures on Government and Binding*, Foris, Dordrecht.

Pollard, C. and Sag, I. (1992). Anaphors in English and the scope of the binding theory. *Linguistic Inquiry*, 23, 261-305.

Reinhart, T. and Reuland, E. (1993). Reflexivity. *Linguistic inquiry*, 24(4), 657-720.

15.06.17

Adam Rimon

Tel Aviv University

A Frequency-Based Model for Lexicalization of Logical Operators

Horn (1972) observed the peculiar absence of the *not-all* quantifier from the lexicon of all studied languages, and suggested that it was so because a lexicalization for it would be redundant, as *some* has *not-all* as an implicature. He also argued that even though the redundancy could also be solved by lexicalization of *not-all* and the absence of *some*, languages "choose" lexicons with less negations.

Katzir and Singh (2013) revisited Horn's puzzle, created a generalization that could capture lower-order and higher-order logical operators more easily, and proposed a more explicit system that predicts the absence of the *not-all* quantifier. Yet, their system lacks some cognitive motivations, and makes some wrong predictions.

I suggest a different, frequency-based approach to the puzzle, based on the interaction between usage frequency effects, tendency toward simplicity, and the primitives used for encoding the operators. Here I

propose a computational model that seems cognitively motivated and accounts for the lexicalization pattern observed by Horn.

08.06.17

Tomer Avraham

Tel Aviv University

Learning Head-Complement Order with Minimalist Grammars

The order between heads and complements varies between languages and within the languages. There are several possible explanations for how this might be represented in the brain and clearly, some order must be learned by an infant acquiring the language.

The talk will discuss my implementation of a computational learner that does just that.

This is the first ever computational learner to learn head-complement order and is also the first ever learner of a formalism called Minimalist Grammars.

01.06.17

Samuel Jay Keyser

MIT

Music, Poetry, Painting, and Easter Eggs

This talk takes the view that modernism in the so-called sister arts of music, poetry, and painting resulted from the abandonment of sets of rules that characterized each genre and that were shared by the artist and his/her audience. Rules governing meter and tonal music are reasonably well understood. I propose a way to think about "rules" for the third genre, painting. These rules define a natural aesthetic, 'natural' in that the rules are shared by the artist and his or her audience in the way that the rules of one's natural language are shared by speaker and listener.

I suggest that the esoteric direction that the sister arts took in the period cultural historians call "Modernism" is a direct result of abandoning the natural, i.e. shared aesthetic for private formats whose origins can be found in the 14th century.

Finally, I will speculate on the similarity between what happened to the arts at the turn of the 20th century and what happened in science after the publication of Principia Mathematica two centuries earlier.

The talk will be delivered via video conference.

Peter Cole & Gaby Hermon

University of Delaware

Can UG Explain the Variation in WH in Situ?

In the 1990s it appeared that a clear picture of WH in situ was emerging from studies on genetically, typologically, and geographically diverse languages: In situ nominal WH ('who', 'what', adjuncts like 'where' and 'when' if they are NPs) were WH variables subject to in situ interpretation by an interrogative element in scopal position (often, by means of 'unselective binding' or choice functions). Critically, no signs of 'movement-like' island sensitivity between the in situ WH form and the scopal spec of CP were detected. In contrast, WH adverbs, e.g. 'why' and 'how', appeared in situ but they seemed to demand a covert 'movement' analysis (or its counterpart in frameworks without movement) because the in situ distribution of WH adverbs was island sensitive (Tsai 1994). Examples ranged from Chinese, spoken in East Asia, to Quechua, spoken in Ecuador, Peru, and Bolivia. The apparent uniformity of WH in situ seemed to imply that the task of linguistic theory was to model and predict the above pattern, and to relate that pattern to general principles ("UG") (for instance, as in Cole and Hermon 1998).

In recent years, however, as more and more WH in situ languages have been examined in greater detail, a variety of new patterns have emerged, suggesting that the uniformity is illusory: e.g., in our work on Balinese we found that, while nominal WH behaves as predicted, WH adverbs show a different distribution. WH adverbs cannot occur in situ, but rather must occur overtly in their scopal position. Furthermore, a WH adverbial in scopal position cannot be interpreted as having 'moved' from a lower clause. These facts are illustrated in (1)-(2).

(1) [**Q** [*polisié inget Koming naar apa*]]? (Q=scopal of WH)
police.Def remember Koming eat what

(1') ***[apa_i [*polisié inget Koming naar t_i*]]?**
what police.Def remember Koming eat
'What did the policeman remember [Koming ate ____]?'

(2) [**pidan_i [*polisié inget t_i Madé nimpug anak ento *t_i*]]?**
When police.Def remember Madé hit person that
OK 'When_i did the policeman remember t_i [Madé hit that person]?'
* 'When_i did the policeman remember [Madé hit that person t_i]?'

Furthermore, reports have been published of nominal WH in situ that is island sensitive, and, hence, is analyzed as undergoing covert WH movement (Vietnamese, Tran 2009); in other studies WH adverbials are shown not to be island sensitive, and thus, require in situ interpretation rather than movement (Shona, Zentz 2016), both contradicting the

consensus generalization. For additional examples see Bayer and Cheng (to appear).

This diversity raises the question of whether any properties are shared by WH in situ across all languages (absolute universals of WH in situ), and, if not, whether any implicational universals exist (cf. Reintges et al. 2006). We conducted a convenience sample, relying on published description and our own fieldwork, of a large number of languages that exhibit WH in situ (and in some cases partially moved) WH constructions. This is an attempt to create a WALS type survey for some rather abstract and sophisticated features that depend on a generative analysis of complicated syntactic phenomena. We reached the following preliminary conclusions:

a) If in a language WH adverbials are not island sensitive, WH nominals will also not be island sensitive. b) If WH in situ manifests one characteristic of lack of 'movement' (e.g., lack of sensitivity to islands), it will lack other indicators like WH agreement. c) If a partially moved WH manifests island effects above the WH spellout site, no WH agreement effects are found above the spellout site. Our presentation will propose a path towards explaining these results based on the varying status of the WH items and the mechanism available in current syntactic theory to derive WH in situ and partially moved WH.

References

Cole, Peter & Gabriella Hermon. 1998. The typology of wh-movement: Wh-questions in Malay. *Syntax* 1(3). 221–258.

Josef Bayer & Lisa Lai-Shen Cheng (to appear) Wh-in-situ, Case #77. To appear in *The Blackwell Companion to Syntax*, 2nd edition.

Dryer, Matthew S. & Haspelmath, Martin (eds.) 2013. *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology.

(Available online at <http://wals.info>, Accessed on 2016-10-30)

Reintges, Chris H., Philip LeSourd & Sandra Chung. 2006. Movement, wh-agreement and apparent wh-in-situ. In Lisa Lai-Shen Cheng & Norbert Corver (eds.), *Wh-movement: Moving on* (Current Studies in Linguistics 42), 165–194. Cambridge, MA: MIT Press.

Tran, Thuan. 2009. *Wh-quantification in Vietnamese*. Newark, DE: University of Delaware PhD thesis.

Tsai, Dylan. 1994. *On economizing the theory of A'-dependencies*. Ph.D. dissertation, MIT. Distributed by the MIT working papers in linguistics, Cambridge, Mass.

Zentz, Jason Arik. 2016. *Forming Wh-Questions in Shona: A Comparative*

11.05.17

Ruben van de Vijver (& Jessica Nieder)

Heinrich-Heine-Universität Düsseldorf

Analogy in the Plural System of Maltese

The complexity of the plural formation in Maltese has baffled many linguists [1], [2], [3], [4]. Maltese has an extremely complicated plural system. Not only are there many different ways to express the plural, there are, in some cases, multiple acceptable plural forms for one singular without any semantic difference.

This raises the question as to the generalizability of the plural system: On what basis do native speakers decide what the plural is of a novel singular [5], [6], [7], [8]? I propose that morphophonological learning is based on analogical principles and that Maltese native speakers generalize from existing items that are stored in their mental lexicon to new word forms.

Jessica Nieder and I conducted a production experiment in which 80 adult Maltese native speakers were asked to produce plural forms for existing Maltese singulars and phonotactically legal nonce singulars (see also [9]). Nonce forms were constructed from words of a corpus of Maltese nominals by changing either the consonants or the vowels or both systematically.

The results indicate an analogical learning mechanism [5], [7]. Participants produced broken plurals for the nonce words with the most frequent CV structures and sound plurals for the nonce words with the most common suffixes that can be confirmed by the corpus items. Thus, singulars of novel words in Maltese are pluralized and their formation is governed by analogous rules. In addition, a first regression analysis corroborates the finding of other studies on the Arabic plural system (e.g. [6], [10]) that the CV template is a major factor in predicting the type of plural of a given word form. Moreover, consonants are more important for the analogous generalizations of broken plurals since the participants produced the highest number of sound plural forms with nonce words where we changed the consonants.

[1] Cardona, T. (1996). *Il-Morfologija tal-Plural fil-Malti*. University of Malta.

[2] Mayer, T., Spagnol, M. and Schönhuber, F. (2013). Fixing the broken plural in Maltese. In Borg, A., Caruana, S. and Vella, A. (eds.), *Perspectives on Maltese Linguistics*. De Gruyter, 129-158.

[3] Mifsud, M. (1994). Internal pluralization in Maltese: Continuity and innovation. In Caubet, D. and Vanhove, M. (eds.), *Actes des Premières Journées internationales de Dialectologie Arabe de Paris*, 91-105.

- [4] Schembri, T. (2012). *The Broken Plural in Maltese – A Description*. Il-Lingwa Tagħna 3. Bochum: Brockmeyer.
- [5] Albright, A. & Hayes, B. (2003). Rules vs. analogy in English past tenses: A computational/experimental study. *Cognition*, 90, 119-161.
- [6] Dawdy-Hesterberg, L. & Pierrehumbert, J. (2014). Learnability and generalisation of Arabic broken plural nouns. *Language, Cognition and Neuroscience*, 29(10), 1268-1282.
- [7] Ernestus, M. & Baayen, H. (2004). Analogical effects in regular past tense production in Dutch. *Linguistics*, 42(5), 873-903.
- [8] Pinker, S. (1998). Words and rules. *Lingua*, 106, 219-242.
- [9] Berko-Gleason, J. (1958). The Child's Learning of English Morphology. *Word*, 14, 150-177.
- [10] McCarthy, J., & Prince, A. (1990). Foot and word in prosodic morphology: The Arabic broken plural. *Natural Language and Linguistic Theory*, 8, 209-283.

04.05.17

Pavel Ozerov

The Hebrew University

Beyond Information Structure: "Information-structural" Phenomena in Burmese and Their Functional Origins

This talk will present an alternative approach to the study of Information Structure, building on previous literature (e.g., Behrens 2012, Matic' and Wedgwood 2013) and own research. It will argue for the study of diverse, mostly interactional functions as underlying factors for a range of information-structural interpretations. After an introductory critical discussion and theoretical arguments for the proposed approach, I will present several case studies of presumably information-structural phenomena in Burmese that, upon closer examination, turn out to have different function and usage. Specifically, they directly relate to interactional phenomena such as stance-taking, intersubjective alignment, and discourse-management. Finally, I will provide a tentative outline for alternative perspectives on the cross-linguistic theoretical study of these phenomena.

27.04.17

Scott Spicer
Northwestern University
Dressing for Change

In this talk, we investigate empirically an apparent change within the field of transitive dressing verbs of Modern Hebrew. Canonically, these verbs limit their argument to a specific semantic type of clothing but are aspectually polysemous between an eventive and a stative reading (i.e. "put on" vs. "wear"). Using a corpus of blogs and other online publications, we show that these verbs are in an early stage of shrinking down to two, *lavash* and *sam*. We also provide preliminary evidence that these verbs are starting to specialize semantically, with *lavash* exclusively taking a stative meaning and *sam* exclusively taking an eventive meaning. Together, we suggest that these two changes are occurring as complements to one another: the drop in argument specification precipitates the increase of semantic specificity. Finally, we provide initial ideas as for the motivation for this change.

20.04.17

Shirly Or
Tel Aviv University
The Case of Literally True Propositions with False Implicatures

Researchers agree that the linguistic code cannot fully represent the truth-conditional content of the proposition expressed, but that the conveyed meaning (including implicatures) is too rich for this purpose. Researchers then recognize a need to define an intermediate meaning level to fulfill this role, one augmented only by some, but not any, pragmatic inferences. While the different approaches differ as to the extent and the type of pragmatic inferences allowed in this intermediate meaning level, they all draw a clear distinction between what contributes to the truth-conditional content of the proposition expressed and what does not (Grice 1975, 1989; Minimalists [Bach 1994; Berg 2002; Borg 2004]; and Maximalists [Sperber and Wilson 1985/1996; Carston 1988, 2003, 2004; Recanati 2001]). A more recent approach offers an orthogonal discourse-based classification, a shift from a Said/Implied dichotomy to an interpretation strength gradation (Ariel 2002a/b, 2008; Sternau 2014, 2015; as well as Jaszczolt 2009).

We argue that this shift is necessary when assessing meaning and truth. To test this claim we conducted two experiments. Our stimuli were highly relevant Particularized Conversational Implicatures (PCIs), which are nonetheless predicted to not influence truth-conditional contents. In both experiments, we were interested in the condition where the target sentence was embedded in a story that rendered it literally true while its PCI was false. Experiment 1 measured participants' offline truth evaluations on a scale of 1-7. Experiment 2 measured participants' online truth evaluations

(either true or false) and response time. Results from these experiments indicate that PCIs do influence the truth-conditional meaning of what the speaker said. Literally true propositions with false PCIs were quite often viewed by participants as not true, and even as false to varying degrees. In experiment 1, items in the tested condition were viewed as lies, though not as full-fledged lies. In experiment 2, when forced to select either true or false, almost 40% of the items in the tested condition were viewed as full-fledged lies. We argue that such judgments testify that speakers evaluate truth based on the strength of the interpretation, regardless of the type of pragmatic inference involved.

30.03.17

Susan Rothstein

Bar-Ilan University

Cardinality Scales, Measuring, and Approximation

In this talk I explore and develop the concept of cardinality scales, originally proposed in Rothstein (2016), which allow us to compare the cardinal properties of pluralities without actually counting the atomic parts of the pluralities. These cardinality scales allow us to express the truth conditions of sentences such as (i) without making direct reference to the cardinalities of the sums of furniture that Mary and John possess.

(i) Mary has more furniture than John.

Cardinality scales allow us to give a single semantic representation for (i), while allowing it to be evaluated in terms of any contextually relevant parameter of comparison in contrast to (ii), which forces a comparison in terms of cardinality:

(ii) Mary has more pieces of furniture than John.

I suggest that cardinality scales are particularly useful in situations of approximation, where we are able to say whether plurality A or B is larger, without knowing what the exact cardinality of either A or B is, and I conclude by reviewing a number of different approximation techniques, comparing approximation using cardinality scales to imprecise and indirect counting.

23.03.17

John Myhill and Dua'a Abu Elhija Mahajne
University of Haifa
***Hebrew Loanwords in the CMC usage of
the Palestinian Israeli Variety of Arabic***

This research examines borrowings from Hebrew into Arabic as used by Nazarene and Iksali Palestinian Israelis in the context of Arabic computer-mediated communication (CMC), specifically the written colloquial Palestinian Israeli dialect of Arabic in Facebook. The study focuses on the frequency of the borrowed items, the reasons for borrowing from Hebrew, and phonological adaptation. Three hypotheses are investigated: First, the most frequent borrowed items are nouns; second, the main reasons for borrowing are to introduce culturally or technologically new concepts, as well as new ways to refer to preexisting notions; finally, borrowed items are adapted to the Arabic phonological system. These hypotheses are shown to be generally correct. However, the frequency of borrowing in the corpus does not reflect the intensity of the language contact between Hebrew and the Palestinian Israeli dialect. We describe the language contact situation between Hebrew and Arabic and demonstrate how intense it is, classifying it as falling between the third and fourth level of intensity according to Thomason and Kaufman's (1988) borrowing scale, but show that borrowing is restricted to lexical borrowing, particularly of nouns, and provide explanations that refer to the political and cultural situation of Palestinian Israelis. Regarding phonological adaptation, this does partially explain how borrowed Hebrew words are represented orthographically, but not entirely, because the [v] sound is borrowed into the representation of spoken Arabic, and also because for a number of sounds (but not all of them), a symbol is used to represent an Arabic sound even though there is another available symbol which also represents an existing Arabic sound which is in fact closer to the original Hebrew sound--for example, <6>, corresponding to Arabic [tʕ], is used for <U>, pronounced by Hebrew speakers as [t], even though Arabic also has [t]. Explanations referring to a number of factors are given for why the various Hebrew sounds are borrowed as they are, as no individual factor can account for all borrowing patterns.