

The 50<sup>th</sup> annual meeting of the Chicago Linguistic Society

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#### Welcome

Welcome to the 50<sup>th</sup> annual meeting of the Chicago Linguistic Society. We are very fortunate this year to have as invited speakers Jonathan David Bobaljik, Bruce P. Hayes, Gregory M. Kobele, Daniel Lassiter, Jessica Coon, Pauline Jacobson, and Katalin É. Kiss.

The conference is being held from the 10<sup>th</sup> to the 12<sup>th</sup> of April, 2014, in Ida Noyes Hall at the University of Chicago (1212 E. 59<sup>th</sup> St., Chicago, IL 60637). Registration begins at 8:00 AM each day of the conference. Opening remarks are scheduled for 8:45 AM on Thursday, and a closing banquet will be held at 7:00 PM on Saturday. Before the banquet, we invite you to come to the History Session Panel celebrating the history of Linguistics at the University of Chicago. That will be held at 2:30 PM on Saturday. For this panel, we are very grateful to have John Goldsmith (who will moderate), Tony Woodbury, Donka Farkas, and Jerrold Sadock.

In addition, there will be a graduate student mixer at 8:00 PM on Friday, held at the University of Chicago Pub in the basement of Ida Noyes Hall.

Many thanks to our invited speakers, History Session panelists, presenters, graduate student and external reviewers, and attendees. We are extremely appreciative of your hard work. In addition, we would like to thank The Office of the Reynolds Club and Student Activities and The Franke Institute for the Humanities for helping sponsor the event. Enjoy the conference!

# - The CLS 50 Organizing Committee

Ross Burkholder
Carlos Cisneros-Juarez
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# Our invited speakers

**Jonathan David Bobaljik** is Professor in the Department of Linguistics at the University of Connecticut. He received his Ph.D. in Linguistics from MIT. He specializes in morphosyntax, morphophonology, and has worked on the general architecture of grammar, focusing on Distributed Morphology. In 2012, he published *Universals in Comparative Morphology: Suppletion, Superlatives, and the Structure of Words*.

**Jessica Coon** is Assistant Professor in the Department of Linguistics at McGill University. She received her Ph.D. in Linguistics from MIT. Dr. Coon specializes in syntax and morphology, and is especially interested in ergativity, split ergativity, case and agreement systems, nominalization, and verb-initial languages. Dr. Coon brings to her research extensive cross-linguistic experience from native North American languages. Dr. Coon's recent work focuses on A'-movement, extraction, and ergativity in Chol, a Mayan language. Her most recent publications have appeared in *Natural Language and Linguistic Theory* and *Language*.

**Bruce P. Hayes** is Distinguished Professor in the Department of Linguistics at UCLA. He received his Ph.D. in Linguistics from MIT. Dr. Hayes is well known for his work in phonological theory especially in areas such as prosodic structure, gradience in phonological knowledge, phonetics-phonology interface and acquisition and learnability of phonological patterns. More recently, Dr. Hayes's research aims at having an unified account of a single phonological phenomenon using three different approaches; i) data analysis in the traditional generative grammar of rules and constraints, ii) experimentation to understand productivity and learnability, and iii) computational modeling of the learnability.

**Pauline Jacobson** is Professor in the Department of Cognitive, Linguistic, & Psychological Sciences at Brown University. She received her Ph.D. from UC Berkeley. She has worked on a range of topics within semantics and the syntax-semantics interface, as well as general issues within grammatical architecture, focusing especially on the hypothesis of Direct Compositionality. Dr. Jacobson asks questions like, "Just what phenomena should be accounted for in the syntax, and what phenomena should be accounted for in the semantics?" Further areas of interest for Dr. Jacobson are mathematical linguistics, and the relationship between logic and language.

**Katalin É. Kiss** is Professor in the Research Institute for Linguistics at the Hungarian Academy of Sciences, the institution from which she received her Ph.D. She has written extensively on the relationship between syntactic structure, on the one hand, and topic and focus, on the other. Some of her main publications includes the monographs *Configurationality in Hungarian* (1987) and *The Syntax of Hungarian* (2003), as well as the edited volumes *Discourse Configurational Languages* (1995) and *Event Structure and the Left Periphery* (1997). She has also published articles in such journals as *Language, Natural Language and Linguistic Theory*, and *Diachronica*.

**Gregory M. Kobele** is Neubauer Family Assistant Professor at the Computation Institute and the Department of Linguistics at the University of Chicago. He received his Ph.D. in Linguistics from UCLA. He specializes in syntax and semantics, approaching them from a computational and mathematical perspective. His recent work includes formally implementing the relationship between the grammar and the parser, focusing especially on ellipsis. In addition, Dr. Kobele has worked

extensively on learning, minimalist syntax, and unifying research between computer science and linguistics.

**Daniel Lassiter** is Assistant Professor in the Department of Linguistics at Stanford University. He received his Ph.D. in Linguistics from NYU. He takes a novel approach to semantic phenomena such as vagueness and presupposition projection through the use of probabilistic techniques to model the knowledge of discourse participants. He also has published work on topics broadly related to gradability in natural language. In particular, he has written on scopal phenomena involving comparatives, and has written extensively on gradability in the domain of modal auxiliaries, verbs, and adjectives.

# **Our History Session panelists**

John A. Goldsmith is the Edward Carson Waller Distinguished Service Professor in the Department of Linguistics, Department of Computer Science, and the College, and Senior Fellow of the Computation Institute at the University of Chicago, where has taught since 1984. He previously taught at Indiana University, having earned his doctorate in Linguistics in 1976 from the Massachusetts Institute of Technology. He pioneered the theory of Autosegmental Phonology and has worked extensively on African languages, with a special focus on tone in Bantu. His books include Autosegmental Phonology (1979) and Autosegmental and Metrical Phonology (1990). He has edited multiple volumes, including the Handbook of Phonological Theory (1995) and the Handbook of Phonological Theory, 2nd edition (2011), the latter together with Jason Riggle and Alan Yu. At present he is preparing with Bernard Laks a book on the history of modern Linguistics and related fields in the mind sciences.

**Donka F. Farkas** is Professor of Linguistics at the University of California, Santa Cruz. She earned her PhD from the University of Chicago in 1981; her dissertation was entitled "Intensionality and Romance Subjunctive Relatives." Her research in formal semantics draws upon data from the Romance languages and from Hungarian and has addressed issues in mood and nominal semantics. In addition to her articles in journals including *Language*, *Semantics and Pragmatics*, *Natural Language* & *Linguistic Theory*, and *Linguistics and Philosophy*, among others, Dr. Farkas is the co-author (with Henriëtte de Swart) of *The Semantics of Incorporation: From Argument Structure to Discourse Transparency* (2003).

Anthony C. Woodbury is a Professor at the University of Texas at Austin, where has taught since 1980. He chaired the Linguistics Department there from 1998 through 2006. A graduate of the University of Chicago—where he earned his BA and MA in 1975, as the advisee of Jerrold Sadock – he went on to earn his Ph.D. from the University of California at Berkeley in 1981. A specialist in the inidgenous languages of the Americas, he has worked extensively on the Yupik-Inuit-Aleut languages and has been researching the Chatino language of Oaxaca, Mexico, since 2003. The latter project has been supported by the Endangered Language Documentation Programme and the National Science Foundation. In addition, he serves as co-director of the digital Archive for Indigenous Languages of Latin America at the Lozano Long Institute of Latin American Studies. His articles have appeared in Language, the International Journal of American Linguistics, Natural Language & Linguistic Theory, and other journals.

Jerrold Sadock is the Glen A. Lloyd Distinguished Service Professor Emeritus at the University of Chicago. He has taught in the Department of Linguistics at Chicago since 1969, having received his doctorate from the University of Illinois that same year. He has worked extensively on Kalaal-lisut (West Greenlandic Inuttut) and has developed the theory of Autolexical Syntax/Automodular Grammar. His articles have appeared in journals including Language, the International Journal of American Linguistics, and Natural Language & Linguistic Theory, and his books include Autolexical Syntax: A Theory of Parallel Grammatical Representations (1991), A Grammar of Kalaallisut (West Greenlandic Inuttut) (2003), and The Modular Architecture of Grammar (2012).

# Schedule

8:00 AM

8:45 AM - 9:00 AM

9:00 AM - 9:30 AM

9:30 AM - 10:00 AM

10:00 AM - 10:15 AM 10:15 AM - 10:45 AM

10:45 AM - 11:15 AM

11:15 AM – 11:30 AM

11:30 AM - 12:30 PM

# Day 1 Schedule (Thursday, April 10th)

All events held in Ida Noyes Hall (1212 E. 59th St.).

2<sup>nd</sup> floor, West Lounge

Registration Begins Opening Remarks
Special Session: Locality
Bryan Rosen (University of Wisconsin–Madison):
Superlatives are Attributive in Hocak
Carolina Petersen (University of Maryland) and Arhonto Terzi
(Technological Educational Institute of Western Greece (Patras)):
Hyper-Raising and Locality: A View from Brazilian Portuguese and
Greek
Break
Ruth Brillman and Aron Hirsch (MIT):
Don't Move Too Close
Byron Ahn (UCLA):
Reflexes of Reflexivity: Locality and the Interfaces
Break
3 <sup>rd</sup> floor, Theater

12:30 PM – 2:00 PM	Lunch
	3 <sup>rd</sup> floor, Theater
2:00 PM – 3:00 PM	Invited Speaker Bruce P. Hayes (UCLA) Comparative Phonotactics
3:00 PM – 3:15 PM	Break

Jonathan David Bobaljik (University of Connecticut)

Morpholocality: Structural Locality in Words

Invited Speaker

3:00 PM – 3:15 PM	Break	
	2 <sup>nd</sup> floor, West Lounge	2 <sup>nd</sup> floor, East Lounge
3:15 PM – 3:45 PM	General Session: Syntax-Semantics Nicholas Baier (UC Berkeley): Spell-out, Chains, and Long Distance	General Session: Phonology Chundra Cathcart (UC Berkeley): The Role of Diachronic Explanation
	10	

	Wh-movement in Sereer	in Prosodic Phonology: Evidence from Vedic Sanskrit
3:45 PM – 4:15 PM	Seungwan Ha (Kyungpook National	Ksenia Bogomolets (University of
	University):	Colorado, Boulder):
	MaxElide in Covert A'-Movement	Acoustic Correlates of Accent in
	Contexts	the Arapaho Language
4:15 PM - 4:30 PM	Break	, , ,
4:30 PM - 5:00 PM		Sarah Bakst and Jonah Katz (UC
		Berkeley):
		A Phonetic Basis for the Sonority
		of [χ]
5:00 PM – 5:30 PM	Ciro Greco (University of Milano-Bicocca):	John Merrill (UC Berkeley):
	Wh-clustering and the Role of Coordination	The Glottal Stop in Sereer: A New
	in Italian Multiple Wh-questions	Type of Marginal Contrast
5:30 PM – 5:45 PM	Break	
	3 <sup>rd</sup> floor, Theater	
5:45 PM – 6:45 PM	Invited Speaker	
	Gregory M. Kobele (University of	f Chicago)
	TBA	

# Day 2 Schedule (Friday, April 11th)

All events held in Ida Noyes Hall (1212 E. 59th St.).

	2 <sup>nd</sup> floor, West Lounge	2 <sup>nd</sup> floor, East Lounge
8:30 AM – 9:00 AM	General Session: Syntax Hsu-Te Cheng (University of Connecticut): A-not-A Questions Revisited: An Adjacency Account	Special Session: Experimental Methods Elise McClay and Michael Wagner (McGill University): Accented Unambiguous Pronouns: Parallel Function, or Topicality and Focus?
9:00 AM – 9:30 AM	Meredith Johnson and Bryan Rosen (University of Wisconsin–Madison): Rightward Movement and Postverbal Constituents: New Evidence from Hocak	Zahra Foroughifar and Vsevolod Kapatsinski (University of Oregon): Determinants of Lengths of Repetition Disfluencies: Probabilistic Syntactic Constituency in Speech Production
9:30 AM – 9:45 AM	Break	
9:45 AM – 10:15 AM	Noureddine Elouazizi and Nancy Hedberg (Simon Fraser University): Subjects and the Structural Licensing of Parenthetical Verb Phrases in Morrocan Arabic	Lyn Tieu (École Normale Supérieure) and Zheng Shen (University of Connecticut): The Littlest Linguists and Their Superlatives
10:15 AM – 10:45 AM	Theresa Biberauer (University of Cambridge, Stellenbosch University): West Germanic Perspectives on the "Depth" of Word-order Variation	Tomoe Arii (University of Tokyo), Kristen Syrett (Rutgers University), and Takuya Goro (Tsuda College): Setting the Standard in the Acquisition of Japanese and English Comparatives
10:45 AM – 11:00 AM	Break	Comparatives
	3 <sup>rd</sup> floor, Theater	
11:00 AM – 12:00 PM	Invited Speaker Daniel Lassiter (Stanford University, Cost, and Monotonic	
12:00 PM – 1:30 PM	Lunch	
	3 <sup>rd</sup> floor, Theater	
1:30 PM – 2:30 PM	Invited Speaker Jessica Coon (McGill University)	

Little-v Agreement: Evidence from Mayan

2:30 PM – 2:45 PM	Break	
	2 <sup>nd</sup> floor, West Lounge	2 <sup>nd</sup> floor, East Lounge
	General Session: Syntax	General Session: Semantics
2:45 PM – 3:15 PM	Michelangelo Falco and Roberto	Mingming Liu (Rutgers
	Zamparelli (University of Trento):	University):
	Overt Partitives, Covert Ones, and	Non-exclusive 'Only' in
0.45 D) (	Italian 'Ne'	Mandarin Chinese
3:15 PM – 3:45 PM	Michael Hamilton (McGill	Nan Li (Cornell University):
	University) and Brandon J. Fry	T in Mandarin: From the
	(University of Ottawa):	Perspective of Negation
	Long-distance Agreement in Algonquian: Accounting for	
	Syntactic Variation	
3:45 PM – 4:00 PM	Break	
	DREAR	
	General Session: Morphology	GENERAL SESSION: SEMANTICS
4:00 PM – 4:30 PM	Brian Jose (University of Glasgow):	Alfredo Garcia-Pardo (University
	Chicagoland and Northwest Indiana	of Southern California):
		Aktionsart and the Aspectual
		Composition of Stative Passives
4:30 PM – 5:00 PM	Caitlin Smith (Unversity of	Peter Guekguezian (University of
	Southern California):	Southern California):
	Morphological Consonant Mutation	Two Aspectual Puzzles in Saisiyat
5:00 PM – 5:15 PM	as Gestural Affixation Break	
3.00 FWI – 3.13 FWI	DREAK	
	3 <sup>rd</sup> floor, Theater	
5:15 PM – 6:15 PM	Invited Speaker	
	Pauline Jacobson (Brown Univ	ersity)
	Silent Linguistic Material: An U	Irban Legend?
-	University of Chicago Pub, E	Basement
8:00 PM	Graduate Student Mixer	

# Day 3 Schedule (Saturday, April 12th)

All events held in Ida Noyes Hall (1212 E. 59th St., 3rd floor).

	2 <sup>nd</sup> floor, West Lounge	2 <sup>nd</sup> floor, East Lounge
8:30 AM – 9:00 AM	Peter Smith (University of Connecticut): Count-mass Nouns, Inherent Number, and the Unmasking of an Imposter	Adam Tallman (UT Austin): Modelling the Lenis-fortis Contrast in Saulteaux Using Multivariate Loglinear Regressions
9:00 AM – 9:30 AM	Thomas Graf (Stony Brook University): Feature Geometry and the Person Case Constraint: An Algebraic Link	Gallagher Flinn (University of Chicago): What is Most Useful to Know? Information and Mongolian Vowel Harmony
9:30 AM – 10:00 AM	Theodore Levin and Ryo Masuda (MIT): Case and Agreement in Cupeño: Morphology Obscures a Simple Syntax	Jonathan Keane (University of Chicago) and Leah Geer (University of Texas at Austin):  Holds or Transitions: Which Is More Important?
10:00 AM – 10:15 AM	Break	1
	3 <sup>rd</sup> floor, Theater	
10:15 PM – 11:15 PM	Invited Speaker Katalin É Kiss (Hungarian Academy of S Identificational Focus Revisited	Sciences)
11:15 AM – 11:30 AM	Break	
	2 <sup>nd</sup> floor, West Lounge	2 <sup>nd</sup> floor, East Lounge
11:30 AM – 12:00 PM	Special Session: Info. Structure Carl Pollard and Murat Yasavul (Ohio State University):  Anaphoric Clefts: The Myth of Exhaustivity	General Session: Morphology Andrew Hippisley and Gregory Stump (University of Kentucky): Network Morphology and Paradigm Signatures: Modeling Variation in Verb-agreement Categories in Split-
12:00 PM – 12:30 PM	Juan José Bueno Holle (University of Chicago):	ergative Alignment Systems Jonathan Havenhill (Georgetown University): Relative Clauses in Bavarian: A
12:30 PM – 1:00 PM	Topics in Isthmus Zapotec Information Structure Saurov Syed (University of Southern California):	Distributed Morphology Approach to Morphosyntactic Variation Jenny Lee (Harvard University): Root Allomorphy in Ranmo (Papuan)

	Focus-movement as Last Resort:
	Evidence from Bangla
1:00 PM – 2:30 PM	Lunch
	3 <sup>rd</sup> floor, Theater
2:30 PM – 4:30 PM	HISTORY PANEL ON THE HISTORY OF LINGUISTICS AT THE UNIVERSITY OF
	Chicago
	John Goldsmith (University of Chicago) moderator
	Donka Farkas (UC Santa Cruz)
	Tony Woodbury (UT Austin)
	Jerrold Sadock (University of Chicago)
	3 <sup>rd</sup> floor, Theater
7:00 PM	Banquet

# **Invited Talks**

# Morpholocality: Structural Locality in Words

Jonathan David Bobaljik (University of Connecticut) Thursday, April 10<sup>th</sup>, 11:30 AM – 12:30 PM, Theater (3<sup>rd</sup> floor)

In this talk, I review the central arguments in Bobaljik 2012 Universals in Comparative Morphology and propose extensions to new empirical domains, drawing on ongoing collaborative work. In that work, I argued that cross-linguistically robust gaps in suppletive patterns point to abstract hierarchical (syntactic) structure in words, as posited in theories of morphology, such as Distributed Morphology. For example, I argued that the cross-linguistic absence of suppletive patterns in which the superlative is built on the positive, but distinct from the comparative (\*good-better-goodest = \*ABA) or where the superlative alone is suppletive (\*good-gooder-best = \*AAB), have specific consequences for the structural representation and for the question of locality in allomorphy: under what conditions may (features of) one morpheme condition the form of another morpheme?

Moving beyond superlatives, we consider suppletion in pronouns, again in cross-linguistic perspective. Pronouns supplete for both number and case (see Moskal 2013). For both features, the same basic (ABB) patterns arise: if there is suppletion, then it is the nominative that has a distinct root from other cases and the singular that is distinct from other numbers. Parity of reasoning suggests a similar (structural) containment relation as seen in superlatives and comparatives (cf. Caha 2009 on case), but without the plausible semantic underpinnings.

I propose refinements or clarifications to the relationship between syntactic representations and morphological representations regarding in particular domains and structurally-defined notions of locality. To some extent, these refinements are motivated by suppletion in a different domain (argument-governed suppletion in verbs) which is shown to have properties that are not found in comparative suppletion.

# **Comparative Phonotactics**

Bruce P. Hayes (UCLA) Thursday, April 10<sup>th</sup>, 2:00 PM – 3:00 PM, Theater (3<sup>rd</sup> floor)

The phonotactic learner of Hayes and Wilson (LI 2008) discovers what could be called **absolute phonotactics**: using a maxent framework, it selects and weights constraints so as to maximize the predicted probability of the set of existing words against a backdrop of all possible strings. The same apparatus can be used for **comparative phonotactics**: given two populations of strings, A and B, we seek a grammar whose output probabilities accurately indicate the likelihood that any given novel string will belong to A or B.

Do language-acquiring children learn comparative phonotactics? I think it likely that they do, and indeed that they do so for multiple purposes. The basis of my hunch is a trend found in recent experimental research in phonology, suggesting that language learners are assiduous, apprehending numerous generalizations about the language not usually captured in classical generative phonology. Basically, whatever is both useful and accessible, gets learned.

As far as comparative phonotactics goes, useful-and-accessible items would include part-of-speech prediction (cf. earlier work of Christiansen), prediction of gender (work of Lyster and others), and two areas I will focus on in this talk. I will put forth a comparative phonotactics that singles out words of the Latinate **vocabulary stratum** of English (Chomsky and Halle 1968), distinguishing it from the native stratum, and ponder how the presence of such strata in a language could be detected by a bootstrapping process. I will also use comparative phonotactic analysis to carry out stem sorting in the sense of Becker and Gouskova: the population of stems in a language can be sorted according to which affix allomorphs they take. The pattern predicted by stem-sorting-cum-allomorph-selection is often indistinguishable from the result of ordinary GEN+EVAL phonology, but in one area of Hungarian vowel harmony, the evidence is quite clear that the pattern must be the result of stem sorting.

# Uncertainty, Cost, and Monotonicity: Experiments on ought

Daniel Lassiter (Stanford University) Friday, April 11<sup>th</sup>, 11:00 AM – 12:00 PM, Theater (3<sup>rd</sup> floor)

It is usually assumed that *ought* denotes a universal quantifier over some set of possible worlds—e.g., those that are morally best, or best relative to some set of goals. Recently this analysis has been called into question by Jackson, Goble, Kolodny & MacFarlane, Cariani, and Lassiter, among others. Taken together, these arguments call into question at least three features of the classical analysis of *ought*: its prediction that *ought* is upward monotonic, its coarse-grained interaction with uncertain information, and its exclusive prediction that the only facts that matter to *ought* claims are facts about the BEST possible worlds.

Jackson, Goble, and Lassiter propose as an alternative a semantics based on expected (moral) value. Letting V be a function which assigns each world a real number representing its moral or teleological value, we can find the expected value of a proposition  $\phi$  as a probability-weighted average of the values of the worlds in  $\phi$ .

$$\mathbb{E}_V(\phi) = \sum_{w \in \phi} V(w) \times P(w|\phi)$$

 $ought(\phi)$  is then defined to be true, to a first approximation, if  $\mathbb{E}_V(\phi)$  is greater than  $\mathbb{E}_V(\neg \phi)$ . This semantics is well-suited to resolve the objections given to the classical semantics: it takes into account probabilistic information and graded values, and does not validate upward inferences unrestrictedly. However, the necessity of this shift has been questioned: are the judgments reported correct? Can they be explained by the classical semantics together with a pragmatic theory in which the domain of worlds over which we are quantifying is constantly shifting in conversation?

The arguments on both sides of this debate use intuitions about truth or falsity of certain sentences in carefully constructed scenarios, and the sequential format in which we as theorists read the relevant sentences leaves open the possibility that judgments about one sentence affect the next. Strikingly, there has been no controlled evaluation of these empirical claims. I will report on several experiments in which participants were asked in variants of the scenarios used in the literature, to judge one of the key sentences. Two features which are intuitively relevant were systematically manipulated: the likelihood of various outcomes given certain actions, and the relative goodness of the possible outcomes of the available actions.

Overall, manipulating the probabilities and likely costs of various actions shifts participants' judgments in exactly the way that the expected value theory would lead us to expect, and the patterns of responses in some cases are flatly incompatible with the monotonic predictions of the classical theory. These results support the expected value theory and cast doubt on the theories of Kratzer (1991, 2012) and Cariani, Kaufmann, & Kaufmann (2012), which predict categorical rather than graded interactions with probability and no effect of manipulating the goodness of outcomes which are not at the extremes. Because the data were gathered between participants, controlling all other aspects of the context, it is not likely that they can be explained even by powerful domain-shifting mechanisms. I conclude by discussing a weakening of Kratzer's account due to von Fintel (2012), which could get the right result by effectively building the expected value theory into its contextual parameters. I argue that this approach has too many degrees of freedom to be a serious competitor to a theory which predicts exactly the patterns observed.

# Little-v Agreement: Evidence from Mayan

Jessica Coon (McGill University) Friday, April 11<sup>th</sup>, 1:30 PM – 2:30 PM, Theater (3<sup>rd</sup> floor)

This paper argues that subject agreement cross-linguistically need not involve a relationship with a high functional head,  $T^0$  or  $Infl^0$ , but may instead be a morphological realization of a direct relationship between an argument and a low functional head,  $v^0$  (contra Woolford 2010). Recent work on ergativity has led to the conclusion that, at least in many languages, ergative subjects are licensed *in situ* by  $v^0$  (e.g., Woolford 1997, Legate 2002). However, the majority of work on ergativity focuses on languages in which ergative alignment is realized by morphological case on nominals (dependent marking), rather than by agreement on the verb (head marking). Drawing on data from Mayan agreement, I provide morphophonological and syntactic evidence that the ergative markers are the result of agreement with a low functional head,  $v^0$  (also suggested for Halkomelem Salish by Wiltschko 2006). This both lends support to proposals of ergative as an inherent case assigned by  $v^0$  and also extends inherent-ergative analyses to agreement systems. Furthermore, this provides a natural account of the fact that ergative and possessive morphemes are identical in Mayan (referred to together as "Set A" prefixes); possessive prefixes are assumed to be a spell-out of an analogous Agree relation between  $v^0$  and the  $v^0$  and  $v^0$  and  $v^0$  and  $v^0$  and the  $v^0$  and  $v^0$  are  $v^0$  and  $v^0$ 

This proposal is important in light of recent work distinguishing agreement from clitic doubling. Nevins (2011) proposes tense invariance as a diagnostic for clitichood cross-linguistically. Syntactic clitics are  $D^0$  elements that have incorporated into the verbal complex; as  $D^0$  elements, they are not expected to vary in form according to the tense of the clause. However, if we assume agreement to always be the result assumed to be a reflex of a relationship between  $T^0$  and the subject, we expect tense variance to occur with morphological agreement. If, however, agreement may be the reflex of a direct relationship between a low functional head,  $v^0$ , and an argument, tense variance is not expected (and indeed not found in Mayan ergative prefixes). While it is still true that if we do find tense variance this points us to agreement, the reverse implication is considerably weakened: tense invariance does not entail clitichood.

# Silent Linguistic Material: An Urban Legend?

Pauline Jacobson (Brown University) Friday, April 11<sup>th</sup>, 5:15 PM – 6:15 PM, Theater (3<sup>rd</sup> floor)

The background of this talk is the hypothesis of Direct Compositionality (e.g., Montague 1971) whereby the syntax and semantics work together to "build" (i.e., prove well-formed) expressions while simultaneously assigning each well-formed expression a model-theoretic interpretation. This entails that each local expression has a meaning, and its meaning and well-formedness a local property of that expression. It will be claimed that this is the "null hypothesis" regarding the organization of the grammar. But if correct, it makes it highly unlikely that there is any process of silencing linguistic material on the basis of identity with some other overt linguistic material in the discourse context.

What, then, of the many arguments that have been given for Silent Linguistic Material (SLM) (which is silenced under identity with other linguistic material)? We consider and try to answer here a (small) sample of such arguments (obviously time permits only a small but hopefully representative sample). First, some such arguments are predicated on non direct compositional accounts of various phenomena, and use those phenomena to argue that small pronounced constituents must be surrounded by other silent material. But the accounts underlying this reasoning are themselves incompatible with direct compositionality, and indeed there are independently motivated and perfectly simple direct compositional accounts of most of these phenomena. (And we will turn this on its head: any evidence against SLM therefore provides evidence for the direct compositional, purely local accounts of the phenomena in question.) Second, many arguments for SLM crucially require formal and not semantic identity between the "silenced" material and its antecedent. But it will be shown that indexicals (see Hankamer and Sag, 1984) provide loud and clear evidence any identity condition cannot care about formal identity, and this in turn undermines some of the arguments for SLM. Third—although not always explicit—SLM is often assumed to provide a reasonable account of how listeners arrive at their understanding of constructions with ellipsis. I will argue that—by itself—positing SLM really provides no such account (after all, a listener needs to figure out what the SLM is), and I will briefly discuss non SLM accounts of VP Ellipsis and fragment answers which do as well. Fourth, there is a growing recent interest in processing results which have been taken as evidence for SLM. But—with or without SLM—this evidence shows only that listeners access the linguistic representation of a recently mentioned expression which figures into the interpretation. The steps that are needed to go from there to the conclusion that the grammar makes use of SLM are quite complex—and probably actually have no motivation in terms of how processing works (although I float the latter claim as a tentative one).

Finally, I will give positive arguments for the non SLM view of fragment answers. Again time precludes details on this (a longer paper—currently in revision—is available on request) but I will concentrate on case connectivity. Given that SLM must require semantic identity this actually is not accounted for. But there is a straightforward non SLM view (due originally to Groenendijk and Stokhof 1984) which gets case connectivity immediately.

#### **Identificational Focus Revisited**

Katalin É. Kiss (Hungarian Academy of Sciences) Saturday, April 12<sup>th</sup>, 10:15 AM – 11:15 AM, Theater (3<sup>rd</sup> floor)

The talk will modify the syntactic analysis of identificational focus proposed in É. Kiss (1998). It will point out theoretical and empirical problems with the assumption of focus movement into the specifier of a FocP projection elicited by the need of feature checking. The theory to be proposed analyzes focus movement as the establishment of a syntactic predicate-subject structure, expressing specificational predication in the sense of Higgins (1973). It will be claimed that this analysis accounts for a wider range of properties of focus movement constructions than current alternative theories. The subject of a specificational construction, an open sentence, determines a set, which the predicate (the focus-movement constituent) identifies referentially. The crucial properties of a specificational predication construction are the existential presupposition associated with the subject of predication (only an existing set can be referentially identified), and the exhaustivity of the focus (the referential identification of a set consists of the exhaustive listing of its members). Hence the [+exhaustive] feature of the focus is not asserted, but is always present as an entailment. The specificational predicate—subject of predication (in other words, the focus-background) articulation of the sentence does not correlate with either new-given division of the information conveyed (the open sentence determining the set to be identified (i.e., the background) can be new, and the listing of the members of the set (i.e., the focus) can also be given, as is the case e.g. in answers to quiz questions. There is no direct correlation between the focus—background articulation and the stress pattern of the sentence, either (e.g., a given focus can be destressed).

# **Papers**

SPECIAL SESSION: LOCALITY

# Superlatives are Attributive in Hocak

Bryan Rosen (University of Wisconsin–Madison) Thursday, April 10<sup>th</sup>, 9:00 AM – 9:30 AM, West Lounge (2<sup>nd</sup> floor)

In this paper, I present new data from superlative adjectives in Hocak (Siouan) and show that they provide more evidence for the attributive nature of superlatives cross-linguistically, as in Matushansky 2008. The default analysis of superlative phrases in predicative environments is that they are APs dominated by a degree phrase (see e.g., Bowers 1987). In contrast, Matushansky (2008) argues that superlative phrases are always nominal: a superlative AP in a predicative position is NP-internal with an elided head noun. While Matushansky considers data from several languages in order to show that the superlative is NP-internal, I demonstrate that Hocak provides strong evidence for this conclusion. Based on distributional evidence, I show that superlatives behave like nouns in predicative environments. The Hocak data cannot be accounted for under either the standard view that predicative superlatives are a "subkind" of adjective or an analysis in which the superlative adjective is nominalized by a null affix. Instead, I follow Matushansky (2008) and argue that Hocak superlative phrases in the predicative position are nominal, and the head noun that the superlative AP modified is elided. This explains the noun-like distribution of Hocak superlatives and the presence of a definite morpheme (cf. Ross 1964). I show that Hocak independently exhibits productive NP-ellipsis. Furthermore, I follow derivational theories of ellipsis (e.g., Aelbrecht 2010) and assume that D<sup>0</sup> is the licensing head for NP-ellipsis (Lobeck 1995).

# Hyper-Raising and Locality: A View from Brazilian Portuguese and Greek

Carolina Petersen (University of Maryland) and Arhonto Terzi (Technological Educational Institute of Western Greece (Patras))

Thursday, April 10<sup>th</sup>, 9:30 AM – 10:00 AM, West Lounge (2<sup>nd</sup> floor)

Hyper-raising (HR) is an instance of long NP movement out of a finite clause to an A position. As a result, the ungrammaticality of sentences such as (1) is expected on various grounds (Lasnik & Boeckx 2006).

(1) \* John<sub>1</sub> seems [that  $t_1$  is a good cook]

Yet, HR has been reported as grammatical in some languages, due to various reasons (availability of multiple specifiers (Ura 1994), valued gender of nouns and absence of Case (Carstens & Diercks 2013)).

In this work we focus on two languages that appear to exhibit HR, Brazilian Portuguese (BP) and Greek, and argue that it is only apparent in both. It is either a) an instance of standard raising—in BP indicative and in Greek subjunctive complements of 'seem', or b) an instance of the embedded

subject having moved to a matrix A' position—in Greek indicative complements of 'seem'. Raising is possible in BP indicatives because the embedded (finite) T is  $\phi$ -incomplete (cf. Nunes 2008), while in Greek subjunctives because the embedded T is defective. We offer novel evidence, from wh-movement, idiom chunks, and quantifier scope, suggesting that the matrix subject of the latter is in a different position than its counterpart when the complement of 'seem' is an indicative. Moreover, considering the views to the A' status of Greek subjects (Alexiadou & Anagnostopoulou 1999), we arrive to the surprising conclusion that based-generated and derived subjects may occupy a different position in the language.

#### Don't Move Too Close

Ruth Brillman and Aron Hirsch (MIT) Thursday, April 10<sup>th</sup>, 10:15 AM – 10:45 AM, West Lounge (2<sup>nd</sup> floor)

Many syntactic locality constraints prohibit movement that is *too long* (e.g., Travis 1984, Chomsky 1993, 1995, Rizzi 1999). Recent work has argued that there are also *anti*-locality constraints (Abels 2003, Boskovic 2005, Erlewine 2013), prohibiting movement that is *too short*. Erlewine (2013, http://ling.auf.net/lingbuzz/001841) proposes that Agent Focus in Kaqchikel (Mayan) results from the anti-locality constraint in (1), illustrated in (2), which rules out short subject movement from spec-TP to spec-CP.

(1)  $\bar{A}$  movement of a phrase from the specifier of XP must *cross* a maximal projection other than XP. Movement from position  $\alpha$  to  $\beta$  *crosses*  $\gamma$  if and only if  $\gamma$  dominates  $\alpha$  but does not dominate  $\beta$ .

(2) 
$$*[XP \ a \ X \ [XP \ t_a \ Y \ ...]]$$
  $\checkmark[XP \ a \ X \ ... \ intervening \ material \ ... \ [XP \ t_a \ Y \ ...]]$ 

This paper provides novel arguments for anti-locality. We survey a disparate set of subject/non-subject asymmetries which are largely well-known, but remain puzzling. We show how the constraint in (1) offers a new and unified way of looking at the phenomena. We address: (i) *that*-trace effects and relatedly (ii) the distribution of *ne...personne* in French and (iii) parasitic gap (PG) licensing in matrix questions.

# Reflexes of Reflexivity: Locality and the Interfaces

Byron Ahn (UCLA) Thursday, April 10<sup>th</sup>, 10:45 AM – 11:15 AM, West Lounge (2<sup>nd</sup> floor)

When a reflexive argument is bound by a local subject (Local Subject-Oriented Reflexivity, LSOR), many languages employ a distinct morphosyntactic configuration for marking reflexivity, including: Dogrib (Na-Dené) *ede*, Italian (Romance) *si*, Japanese (Altaic) *zibunzisin*, Kannada (Dravidian) *-koND*, Russian (Slavic) *sebe*, and Shona (Niger-Congo) *zvi*.

This raises an important and naive question: what is it about local subjects that gives them a

privileged ability to license LSOR-marking? Upon further investigation, a second more informed puzzle arises: *only some local subjects* (specifically, non-derived subjects) license LSOR-marking.

I argue that reflexive anaphors move to a position near the subject, and this movement is done to locally satisfy the syntactic and semantic demands of a reflexive Voice<sup>0</sup>, REFL, which ensures (without stipulation) that the subject is not a derived one. With only REFL, its syntactic/semantic properties, and constraints on locality, we thus derive how the grammatical role of the antecedent may effect LSOR-marking.

Additionally, this analysis derives the range of possibilities for morphosyntactic exponents of LSOR: including a unique anaphor, verbal affix, and/or special word-order. Specifically, REFL Voice<sup>0</sup> can be realized (or not), it induces a (covert) movement that can result in a special word-order (or not), and anything it selects (including an anaphor) can be featurally-distinct and can thus have a unique form (or not). These are all purely instances of surface variation with the same formal underpinnings.

As such, the subject-orientation puzzles presented by LSOR, as well as its possible morphosyntactic instantiations, are reduced to issues of locality and surface variation.

GENERAL SESSION: SYNTAX-SEMANITCS

# Spell-out, Chains, and Long-distance Wh-movement in Sereer

Nicholas Baier (UC Berkeley) Thursday, April 10<sup>th</sup>, 3:15 PM – 3:45 PM, West Lounge (2<sup>nd</sup> floor)

In this paper, I examine novel data from long distance wh-dependencies in Seereer, an Atlantic language of Senegal. In addition to providing striking evidence that long distance wh-movement proceeds successive cyclically through the edge of each clause, I argue that the Seereer data show that movement to all CP phase edges is motivated by agreement with features on C<sup>0</sup>, contra claims in the literature (e.g., Bošković 2007). Long distance wh-questions in Seereer are characterized by (a) the presence of an obligatory pronoun at the edge of each embedded clause and (b) the presence of special morphology on each verb along the path of the extraction. I show that this verbal morphology spells out a valued Op-probe on C<sup>0</sup>, which triggers the movement of a wh-phrase to its Spec (McCloskey 2002). I argue that the embedded pronouns are overtly spelled out copies of the moved wh-phrase. Evidence for this analysis comes from island constraints, reconstruction effects, and quantifier float. I further argue that overt copies surface at the edge of the CP precisely because they enter into a feature valuation relationship. Specifically, I propose that valuation of an OP-probe defines a copy as the head of an A-bar chain. Thus, the application of successive cyclic movement does not result in one long chain, but instead in a series of smaller chains. This principle, when combined with the independently motivated principle of spelling out the heads of chains (Nunes 2004), results in the spelling out of intermediate copies in Spec-CP in long distance movement chains.

#### MaxElide in Covert A'-Movement Contexts

Seungwan Ha (Kyungpook National University) Thursday, April 10<sup>th</sup>, 3:45 PM – 4:15 PM, West Lounge (2<sup>nd</sup> floor)

MaxElide is a constraint on ellipsis stating that deletion must target the largest deletable constituent within a parallelism domain, roughly stating that an elliptical constituent finds a semantically identical antecedent constituent modulo focus-marked constituents (Takahashi & Fox 2005, cf. Merchant 2001). The previous analyses addressed circumstances where contrastive focus is contained within the higher elliptical constituent, and MaxElide appears to be inapplicable. However, the analyses suffer from conceptual and empirical problems, such as how ellipsis could occur without satisfying the ellipsis licensing condition, how we should define "deletable" constituents and why PF cares about deletion of VP-constituents. I propose that syntax mark deletable constituents with an [E]feature, and that PF look for the highest [E]-marked constituent (i.e., PF-account). I argue that the PF-account resolves the problems at hand. However, the current account appears to face new empirical problems in Antecedent Contained Deletion (ACD) and Comparative Deletion (CD); namely, neither TP nor VP satisfies the licensing condition. Under the current analysis, therefore, VP-ellipsis shouldn't be possible, contrary to fact. To resolve the challenge, I assume that ACD and CD involve a matching structure. Following the matching hypothesis of relative clauses (Sauerland 2000), I argue that VP undergoes movement in ACD and CD, forming a chain (cf. Johnson (2001)). Chain reduction takes place under identity with the external head. If this is on the right track, neither of the constructions pose a problem for the PF account of MaxElide; MaxElide is inapplicable as VPs do not involve ellipsis.

# Wh-clustering and the Role of Coordination in Italian Multiple Wh-questions

Ciro Greco (University of Milano-Bicocca) Thursday, April 10<sup>th</sup>, 5:00 PM – 5:30 PM, West Lounge (2<sup>nd</sup> floor)

Italian coordinated wh-questions display previously unnoticed properties:

#### TYPE 1

- (1) a. \* Vorrei sapere perché e dove avete mangiato. Want.COND.1SG know why and where have.3PL eaten
  - b. \*Vorrei sapere cosa e dove avete mangiato. Want.COND.1SG know what and where have.3PL eaten

#### TYPE 2

- (2) a. Vorrei sapere dove avete mangiato e perché. Want.COND.1SG know where have.3PL eaten and why
  - b. Vorrei sapere cosa ha mangiato e dove. Want.COND.1SG know what have.3PL eaten and where

Only *Type 1 questions* disallow reason/purpose *whs* (1a); in *Type 1 questions* argument and adjunct *whs* cannot co-occur (1b). These contrasts are unexpected under sluicing accounts (Merchant 2001). I propose that in *Type 1* questions coordination is used to build a complex interrogative projection (**Wh-Cluster**) before entering the derivation (4a); then, the Wh-Cluster is merged according to the selectional properties of the elements contained in it (4b); finally, it is pied-piped to the CP:

- (4) a. [CoordP Wh1[CoordP & [Wh2]]]
  - b. [TP [VP [CoordP Wh1[CoordP & [Wh2]]]]]
  - c. [CP [CoordP Wh1[CoordP & [Wh2]]]k [TP [VP tk]]]

This predicts that adverbial *wh*-phrases do not co-occur in the same *Wh*-Cluster with Reason/Purpose and Argument *wh*-phrases (1a-b), since they are first-merged in different positions. Moreover, the proposal correctly predicts that, differently from *Type 2* questions (Moro 2011), *Type 1* questions can contain more than two wh-phrases (1c):

- (5) a. Vorrei sapere come, quando e dove avete mangiato. Want.COND.1SG know how, when and where have.3PL eaten
  - b. \* Vorrei sapere come avete mangiato quando e dove. Want.COND.1SG know how have.3PL eaten when and where

GENERAL SESSION: PHONOLOGY

# The Role of Diachronic Explanation in Prosodic Phonology: Evidence from Vedic Sanskrit

Chundra Cathcart (UC Berkeley) Thursday, April 10<sup>th</sup>, 3:15 PM – 3:45 PM, East Lounge (2<sup>nd</sup> floor)

Vedic Sanskrit has a well-known rule by which  $n \to n$  if r or s precedes it at any distance and no coronal obstruent intervenes. Lexeme-internally, this process is exceptionless; however, post-lexical retroflexion (PLR) of Vedic Sanskrit 1pl clitics is a gradient phenomenon. I show that a model sensitive to diachronic factors better predicts the distribution of retroflex clitics than a model which assumes phonetic naturalness in prosodic phonology. An initial corpus study showed that non-adjacent triggers, but not adjacent triggers, are highly significant predictors of PLR; this is odd, given that the process can occur at any distance. A second corpus study showed that both non-adjacent and adjacent triggers that would have operated at an earlier historical stage are highly significant predictors of PLR. The opacity created by diachronic change likely resulted in the undergeneralization of this post-lexical rule by learners.

# Acoustic Correlates of Accent in the Arapho Language

Ksenia Bogomolets (University of Colorado, Boulder) Thursday, April 10<sup>th</sup>, 3:45 PM – 4:15 PM, East Lounge (2<sup>nd</sup> floor) The Arapaho language (one of the Plains Algonquian languages of the Algic family) is traditionally claimed to be a pitch-accent language, meaning that prominence is marked exclusively or mainly by modulation of fundamental frequency (Goddard 2001, Cowell 2008). The main goal of the current research was to experimentally establish the phonetic difference between accented and accentless vowels in Arapaho. The present study assesses Arapaho prominence with six acoustic variables: pitch peak of the target vowel (F0, fundamental frequency) and average pitch throughout the target vowel, which are measured in Hertz (Hz); amplitude peak and average amplitude throughout the vowel (in dB); duration (in ms), and spectral quality of the vowel (peripheral versus central, i.e. precision of articulation, F1, F2, F3).

Contrary to the traditional analysis of this language, Arapaho can hardly be called a pitch-accent language. While accent in short vowels is marked with significantly higher fundamental frequency and higher amplitude, accent in long vowels is cued by longer duration. From the phonetic point of view, Arapaho functions more like a stress-accent system that deploys a set of phonetic cues to mark prominence. Phonologically, prominence in Arapaho does not function like stress in the traditional interpretation of the term—the system exhibits severe breaches of the principle of culminativity. At the same time, I show that accent in Arapaho might function very much like accent in stress systems in that it is a morpho-lexical feature; the accent shifts depending on morphemic, morphological, and lexical properties. The data presented in the study call for a revision of the notion of stress-accent systems in the typology of prosodic systems.

# A Phonetic Basis for Sonority of $[\chi]$

Sarah Bakst and Jonah Katz (UC Berkeley) Thursday, April 10<sup>th</sup>, 4:30 PM – 5:00 PM, East Lounge (2<sup>nd</sup> floor)

Although after voiceless stops French rhotics are realized as voiceless uvular fricatives  $[\chi]$ , they pattern phonologically as high-sonority liquids and are the only obstruent allowed between a consonant and a vowel. This poses a problem for the sonority hierarchy.

This experiment tests whether  $[\chi]$ , which has apparent approximant-like formant structure (Yeou & Maeda 1995) patterns like the fricative [f] or the approximant [l] in its ability to convey information in formant transitions from a preceding consonant.

In an AX burst detection task, native English speakers heard syllables of the form ClV,  $C\chi V$ , and CfV (spoken by a native French speaker) with and without a burst. D-prime (signal detection) scores suggest that listeners are more sensitive to the difference between tokens that do and do not have bursts when the medial segment is [f] and less sensitive when it is [ $\chi$ ] or [l].

This suggests that the sonority of  $[\chi]$  is grounded in acoustics and perception, rendering an abstract account of sonority unnecessary. This result predicts that other fricatives with long front cavities should also be able to function as high-sonority segments.

# The Glotal Stop in Sereer: A New Type of Marginal Contrast

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John Merrill (UC Berkeley)
Thursday, April 10<sup>th</sup>, 5:00 PM – 5:30 PM, East Lounge (2<sup>nd</sup> floor)
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It has long been noted that the glottal stop is often exploited differently from other segments within the phonological systems of many languages. While in some languages it can behave much like any other consonant phoneme, in other languages the glottal stop has a more prosodic function. In West Africa especially, the factors which condition the appearance of the glottal stop are for a number of languages quite complicated, and can be dependent on not only prosody, but also morphology and syntax, as in Fula and Dagbani (Hyman 1988). In this paper I explore the behavior of the glottal stop in Sereer (Northwest Atlantic; Senegal), and show that its use as a contrastive segment in the language is unique among languages discussed in the existing literature. I argue that it is an underlying segment only in one morpheme— the past tense marker -?.

a ret-a 'he goes' a ret-?-a 'he went' i mbug-a 'we want' i mbug-?-a 'we wanted'

This behavior is not only unique for the glottal stop in West Africa and elsewhere in the world, but is also a previously undescribed pattern in the typology of so-called "marginal contrasts" (Currie Hall 2013), where the robustness of a phoneme or phonemic contrast is in some way severely restricted in comparison to other phonemes/contrasts in the language.

GENERAL SESSION: SYNTAX

#### A-not-A Questions Revisited: An Adjacency Account

Hsu-Te Cheng (University of Connecticut) Friday, April 11<sup>th</sup>, 8:30 – 9:00 AM, West Lounge (2<sup>nd</sup> floor)

In this paper, I examine the less-observed phenomenon of A-not-A questions (AQ) in Mandarin Chinese (MC) that AQ cannot be preceded by (most) adverbs. I first show that the claim in Law (2006) that adverbs are potential binders and will interfere with variable binding cannot hold because they clearly do not interference with variables left by wh-movement. I then give my proposal that AQs in MC bear a [Q] feature that, as an affix, must be incorporated into Infl(ection) to be phonologically supported. Any adverbs between AQ and the INFL will thus block adjacency and incorporation, resulting in ungrammaticality. I further propose that AQ in MC is an instantiation of  $\Sigma$ -phrase in the sense of Laka (1990), which can host focus projections. The proposal is claimed to have several advantages. First, the fact that other elements, such as PPs, negation, and focus elements, also block AQ receives a straightforward account now, since they also block adjacency. Second, the proposal gives us a new perspective to analyze the island-sensitivity of AQ (cf. Huang (1982)). Under the analysis here, AQ cannot appear in islands because the [Q] feature is not adjacent to the (matrix) INFL. Furthermore, it sheds lights on the height/position of other adverbs that are compatible with AQ, such as temporal adverbs. This is expected if temporal adverbs are IP-adjoined

# Rightward Movement and Postverbal Constituents: New Evidence from Hocak

Meredith Johnson and Bryan Rosen (University of Wisconsin-Madison) Friday, April 11<sup>th</sup>, 9:00 AM – 9:30 AM, West Lounge (2<sup>nd</sup> floor)

This paper examines rightward displacement in Hocak (Siouan, SOV) and evaluates how Kayne's (1994) Linear Correspondence Axiom (LCA) and Bhatt & Dayal's (2007) account of postverbal constituents could be extended to Hocak. In Hocak, DP and CP arguments can move rightward, while resultative and verbal predicate complements cannot. In contrast, all complements can move leftward across a subject. Kayne predicts that postverbal predicates and DP objects would be derived the same way: the object/predicate would move above the S, followed by movement of the SV constituent above the object/predicate. Alternatively, Bhatt & Dayal claim that postverbal DPs in Hindi-Urdu are derived via rightward movement of a remnant VP. However, it is unclear what would prevent movement of a remnant VP containing a predicate complement while allowing movement of a VP containing a DP complement.

We do not follow Kayne or Bhatt & Dayal; instead, we claim that Hocak has underlying SOV word order, and that postverbal arguments are generated via rightward movement. For the sake of concreteness, we adopt Manetta's (2012) analysis of postverbal orders in Hindi-Urdu, which assimilates rightward movement to leftward scrambling. The reason why arguments may move rightward, but not predicates, is simply due to a difference in syntactic category. We propose that the EPP feature that attracts rightward scrambled elements can only be satisfied by DPs, and not predicates. While it is certainly reasonable for some languages that surface with SOV order to be head-initial, we contend that Hocak is best treated as head-final.

# Subjects and the Structural Licensing of Parenthetical Verb Phrases in Morrocan Arabic

Noureddine Elouazizi and Nancy Hedberg (Simon Fraser University) Friday, April 11<sup>th</sup>, 9:45 AM – 10:15 AM, West Lounge (2<sup>nd</sup> floor)

This paper studies the syntax of Urmson's (1952) type of parenthetical verbs phrases (henceforth PVPs) such as: tanden "I think", tane3taqed "I believe" and taneftard "I suppose" in Moroccan Arabic. We argue that the syntax of the parenthetical verb phrases in Moroccan Arabic is not always unaffected by that of the host clauses they anchor to. We propose that the instances where the PVPs do not anchor to their host clauses follow from the fact that the anchoring of the PVPs to the host clauses in Moroccan Arabic is sensitive to the existence of a non-indefinite subject argument in the host clause. The supporting evidence for this proposal includes: First, the PVPs cannot occur in clausal hosts with an impersonal subject, an expletive subject, or an indefinite subject. Second, in the context of control structures, it is not possible for the PVPs to occur in the syntactic domain of the controlled argument position. Third, the PVPs in Moroccan Arabic cannot attach to clausal structures that lack a subject, as in the context of the structures that are answers to polar questions.

We derive the constraint on the clausal anchoring of the PVPs from the fact that the PVP in Moroccan Arabic has an articulated internal structure that contains a referential pro subject that requires establishing a structural dependency with a non-indefinite subject in the host clause so as to ensure that the features content of the *pro* subject inside the PVP is interpreted and licensed (recovered *a la* Rizzi (1986) and Holmberg (2005)).

# West Germanic Perspectives on the "Depth" of Word-order Variaion

Theresa Biberauer (University of Cambridge, Stellenbosch University) Friday, April 11<sup>th</sup>, 10:15 AM – 10:45 AM, West Lounge (2<sup>nd</sup> floor)

This paper argues that largely unknown verb-cluster data from two relatively understudied West Germanic languages, Afrikaans and Swiss German, has significant consequences for (i) the current debate about the nature of attested morphosyntactic variation, and (ii) our understanding of a recently proposed syntactic universal, the Final-over-Final Constraint (FOFC; Biberauer, Holmberg & Roberts 2007,2014). (i) centres on whether morphosyntactic variation is exclusively a "surface" PF matter (Berwick & Chomsky 2011), or whether there is evidence for a distinction between "deep", Narrow Syntax/NS-internal and "surface", PF variation; (ii) on whether the ban on head-final phrases dominating head-initial ones within the same extended projection should be formulated as a "late" PF constraint, leaving open the possibility that final-over-initial structures may initially be generated within the syntactic component, or whether FOFC is a genuine hierarchical universal in the sense of Whitman (2008), in which case FOFC-violating structures are completely ruled out (cf. Sheehan 2013 and Etxepare & Haddican 2012 for the "surface"-oriented view, and Biberauer, Holmberg & Roberts 2014 for the "deep" one).

So-called 231-clusters constitute the paper's empirical focus. Careful consideration of the Swiss German and Afrikaans data reveals that these structures are underlyingly quite different: the former arise as a result of Local Dislocation at PF (Salzmann 2013), while the latter involve merger of cluster elements that can be shown (i.a. via "quirky V2" and predicate-doubling phenomena) not to combine into an Extended Projection in a FOFC-violating way. We therefore conclude that morphosyntactic variation can be both "deep" and more superficial, and that FOFC is indeed a "deep" universal.

Special Session: Experimental Methods

# Accented Unambiguous Pronouns: Parallel Function, or Topicality and Focus?

Elise McClay and Michael Wagner (McGill University) Friday, April 11<sup>th</sup>, 8:30 AM – 9:00 AM, East Lounge (2<sup>nd</sup> floor)

This talk presents data from a series of experiments investigating the distribution of stressed pronouns in unambiguous environments (e.g., "John complimented Mary. Then <a href="mailto:she/#she complimented Bill.">she/#she complimented Bill."</a>), in both passive and active target sentences. We compare the predictions of three

theories: Kameyama's (1997) Complementary Preference Hypothesis (a pronoun is accented when it refers to a less salient among a number of potential of referents), Smyth's (1994) Parallel Function view (a pronoun is accented if its grammatical role and/or thematic role is not parallel to that of the antecedent), and an account based on Focus Theory (Rooth 1992) (a stressed pronoun in subject position indicates a double contrast of the form [x-F VP-F], where x and y contrast with their counterparts in the antecedent, cf. de Hoop 2003). Each theory was insufficient to explain some aspects of the data pattern in our experiments; however, Focus Theory correctly captures the pattern if it is assumed that: (i) An accent on a subject can express the switch to a contrastive topic; and (ii) the subjects of passive sentences are always topics, but the subjects of active sentences only optionally are.

# Determinants of Lengths of Repitition Disfluencies: Probabilistic Syntactic Constituency in Speech Production

Zahra Foroughifar and Vsevolod Kapatsinski (University of Oregon) Friday, April 11<sup>th</sup>, 9:00 AM – 9:30 AM, East Lounge (2<sup>nd</sup> floor)

Probabilistic approaches to linguistic constituency suggest that constituent structure emerges in part from co-occurrence: items used together fuse together forming cohesive, hard-to-interrupt units (Bybee 2002, see also Gregory et al. 1999, Kapatsinski 2010, Stefanowitsch & Gries 2003). In this talk, we will discuss the results of our study on the interaction between probabilistic factors and syntactic structure of repetition repairs. Repetition repairs are interruptions in the flow of speech when the speaker chooses to repeat one or more words to buy time to plan upcoming speech (Fox & Jasperson 1995, Kapatsinski 2010). The questions we address in this paper are 1) what determines the cohesiveness of the repeated multiword unit in repetition repair, and 2) how the speaker decides on where to start repetition from. We hypothesized that, besides constituency, cohesion of a multiword unit is influenced by the co-occurrence statistics of the words forming the unit. Using variable importance measures derived from random forests of conditional inference trees (Strobl et al. 2009), we found that the best probabilistic predictor of location of restart is backward transitional probability (rather than forward transitional probability, string frequency or mutual information). The results suggest that the location of restart in repetition repair is affected by probabilistic influences on constituency, and that the decision is made by moving backwards through the utterance, skipping over constituents that are too fused to be interrupted.

# The Littlest Linguists and Their Superlatives

Lyn Tieu (École Normale Supérieure) and Zheng Shen (University of Connecticut) Friday, April 11<sup>th</sup>, 9:45 AM – 10:15 AM, East Lounge (2<sup>nd</sup> floor)

This paper presents novel experimental evidence for a restriction on the interpretation of superlative expressions such as (1) in English; while the absolute reading in (2) is available, the relative focus-internal reading in (3) is not.

- (1) (Sally bought the biggest painting by Monkey.
- (2) Absolute reading (ABS): Of the paintings produced by Monkey, Sally bought the biggest one.
- (3) Relative focus-internal reading (RIN): Of the paintings purchased by Sally, the biggest was produced by Monkey (and not other painters).

While (2) is universally available, (3) is available only in language without articles (NP languages) (Pancheva & Tomaszewicz 2013; Shen, to appear). Recent accounts derive this interpretive restriction from a combination of syntactic conditions, i.e. the Phase Impenetrability Condition (Chomsky 2000) and anti-locality (Abels 2003), and a setting of the NP/DP parameter. We investigate the comprehension of such superlative expressions in English-speaking adults and 4-year-olds. We first present results supporting the generalization that English-speaking adults disallow the RIN. We then show that 4-year-olds have difficulty comprehending such structures. If 4-year-olds can be assumed to have knowledge of the universal syntactic conditions, and to have already set the NP/DP parameter by 4 (cf. Koulidobrova 2012), the results suggest that these ingredients are insufficient to derive the target interpretive restrictions. Finally, we discuss the learnability of such restrictions, given the observation that children appear to receive very little evidence in their input for structures such as (1).

# Setting the Standard in the Acquisition of Japanese and English Comparatives

Tomoe Arii (University of Tokyo), Kristen Syrett (Rutgers University), and Takuya Goro (Tsuda College)

Friday, April 11<sup>th</sup>, 10:15 AM – 10:45 AM, East Lounge (2<sup>nd</sup> floor)

How comparatives are realized varies cross-linguistically. For example, while English has an overt comparative morpheme (more/-er), Japanese lacks one. The two languages also differ in the interpretation of measure phrases. In English, (1a) expresses *absolute* measurement, and (1b) *differential* comparison between x and a standard. In Japanese, (2) can only express differential comparison between x and a contextually determined standard.

- (1) a. x is 2 meters tall
  - b. x is 2 meters taller (than y)
- (2) x-wa 2-meetoru takai

We show that despite these differences, children in both languages proceed along a similar developmental path, interpreting differential comparatives absolutely, even when an explicit standard is provided by a *than/yori* phrase.

Experimental participants (children age 4-6, adults) were taught a novel unit of measurement. In each test trial, they were shown one character (the standard), then a second on a separate screen. A puppet made a prediction about the difference in height or length between the two.

- (3) a. I think the lion is 2 chipanis taller.
  - b. Raion-wa 2 kirari takai-to omou.

The two characters were seen together, and the puppet reminded children of his prediction. Children overwhelmingly interpreted the comparatives absolutely. Following Sawada & Grano (2011) and Svenonius & Kennedy (2006), we assume that a measure phrase is accompanied by a *Meas* head, and that *Meas* composes with adjectives with a minimum scalar value. We hypothesize that children, driven by *Meas*, set the standard to 'zero' by default, and must learn that this standard can be overridden.

GENERAL SESSION: SYNTAX

Overt Partitives, Covert Ones, and Italian 'Ne'

Michelangelo Falco and Roberto Zamparelli (University of Trento) Friday, April 11<sup>th</sup>, 2:45 PM – 3:15 PM, West Lounge (2<sup>nd</sup> floor)

According to Jackendoff (1977) partitives involve an intermediate NP after the D(eterminer), and a DP inside an of PP that expresses the subpart relation (Ladusaw 1982, Barker 1998).

(1) three [NP1 pens] of [DP2 the [NP2 pens]]

In this talk we present novel evidence in favor of (1), and against structures without NP1 (Matthewson, 2001). Furthermore, we extend the analysis to elliptical DPs that refer to a subset of a previously introduced nominal (2), analyzed as covert partitives since Enc (1991).

(2) John bought [ten cheap pens] $_j$  yesterday, but [two/most/many/each one] $_l$  did not write well. (l included in j)

Lastly, we show how the analysis involving NP1 can also cover NP-anaphors such as Italian 'ne' ('ONES\_clit.') (3), even when these forms appear without a D.

(3) Tu hai [DP quattro bici costose] e io  $ne_i$  ho [DP due  $t_i$  economiche]. you have [DP four bikes expensive] and I ONES\_clit. $_i$  have [DP two  $t_i$  cheap]

The study of the restrictions on the occurrence of 'bare' Italian 'ne' leads us to propose a new tripartite semantic classification of verbs on the basis of their object selection. The distinction between kind- and object-taking predicates (Laca 1990) is refined by splitting the latter in two classes: Token-of-Kind verbs and Token verbs.

# Long-distance Agreement in Algonquian: Accounting for Syntactic Variation

Michael Hamilton (McGill University) and Brandon J. Fry (University of Ottawa) Friday, April 11<sup>th</sup>, 3:15 PM – 3:45 PM, West Lounge (2<sup>nd</sup> floor)

We propose that Long-distance agreement (LDA) in Algonquian languages (e.g., Dahlstrom 1991, Rhodes 1994, Branigan & MacKenzie 2002, Bruening 2001, 2009, LeSourd 2010, Lochbihler & Mathieu 2013) can be used as a diagnostic for variation in syntactic structure. We identify three distinct

patterns of LDA in Algonquian languages, which is a new generalization: (1) "free-LDA", any embedded argument can be the goal; (2) "restricted-LDA", only structurally highest argument can be the goal, with two sub-patterns: (2a) "subject-LDA", typically limited to embedded subjects; and (2b) "highest-rank-LDA", typically limited to embedded subjects in the direct voice and embedded objects in the inverse voice. We propose that this variation results from the interaction of two parameters: (A) the probe on C either (i) searches for the closest DP with a discourse feature (free-LDA); or (ii) searches for the closest DP with f features restricted-LDA); and (B) the inverse system is either (i) morphological with no syntactic consequences (subject-LDA); or (ii) has syntactic consequences, such as moving the highest ranked discourse participant to a functional projection higher in the tree (highest-rank-LDA). Our analysis accounts for restricted-LDA patterns which are unexpected given previous accounts, e.g., Branigan & Mackenzie (2002) and LeSourd (2010).

GENERAL SESSION: MORPHOLOGY

# Chicagoland and Northwest Indiana

Brian Jose (University of Glasgow) Friday, April 11<sup>th</sup>, 4:00 PM – 4:30 PM, West Lounge (2<sup>nd</sup> floor)

This paper draws upon a real-time cross-sectional corpus of oral history, sociolinguistic, and other interviews recorded with a subsample of 44 life-long residents of northwestern Indiana's Calumet Region (27 men, 17 women) in order to track the progress of the Northern Cities Shift (NCS) there between the mid-to-late 1980s and the mid-to-late 2000s. The status of the NCS is also assessed in neighboring Chicagoland over the course of the same 20-year period according to descriptions available in the literature (cf. Labov, Ash, & Boberg 2006; McCarthy 2011). A comparison of these two communities, focusing on the relationships between the 'short a' vowel (as in trap) and the 'short e' vowel (as in dress) and between the 'short e' vowel (as in dress) and the 'short o' vowel (as in lot), will show that the NCS advanced considerably in Chicagoland but remained largely stable in Northwest Indiana over the course of these two decades. The role of historical and of socio-cultural factors in Northwest Indiana's lesser degree of participation in the NCS—specifically, the timeline of settlement there and the nature of contemporary relationships across the state line between Chicagoland and Northwest Indiana—will be considered, and it will be proposed that both of them are helping to restrain Northwest Indiana's full participation in the shift.

# Morphological Consonant Mutation as Gestural Affixation

Caitlin Smith (University of Southern California) Friday, April 11<sup>th</sup>, 4:30 PM – 5:00 PM, West Lounge (2<sup>nd</sup> floor)

In a variety of languages, some morphological markers, rather than being overt affixes, are signaled by mutation of a consonant in the root form. Often this mutation is analyzed as the product of featural affixation: a segmentally unaffiliated or 'floating' feature acts as an affix and docks with

a segment in a root. However, many consonant-affiliated features are not attested as featural affixes; those that are tend to describe some additional action of the vocal tract (protrusion of the lips, palatalization, opening of the velum, etc.). These gaps in attested consonant-mutating featural affixes can be explained if the articulatory actions themselves are taken to be the units of representation of a phonological system, as in Articulatory Phonology (AP). Lexical items in AP are represented as sets of coupled gestures, and consonant mutation can be modeled as the coupling of a gestural affix to one of the gestures that make up a root. The systematic variability of the landing sites and timing of gestural affixes merits the development of some kind of mechanism for determining the coupling relations that exist between gestures, a grammar that operates over gestural representations. This can be achieved within the framework of Optimality Theory by proposing constraints that determine ideal patterns of coupling between gestures, as well as gestural co-occurrence constraints that prohibit certain types of gestures from being coupled to one another.

GENERAL SESSION: SEMANTICS

# Non-exclusive 'Only' in Mandarin Chinese

Mingming Liu (Rutgers University) Friday, April 11<sup>th</sup>, 2:45 PM – 3:15 PM, East Lounge (2<sup>nd</sup> floor)

Exclusive particles such as *only* 'exclude' things by negating a set of propositions. Think of the set as the quantificational domain of the exclusive, and call it  $C_{neg}$ . The paper explores what a  $C_{neg}$  could be. Crucially, we propose  $C_{neg}$  could be empty, thus explaining the non-exclusive use of certain exclusive particles.

Specifically, We examine a particular exclusive adverb in Mandarin, jiu, which can be either exclusive or non-exclusive. To explain its non-exclusiveness, we propose that (i) jiu asserts that only propositions asymmetrically entailing its prejacent are false, and (ii) it presupposes that its associate—a *focus* or *contrastive topic*—is the lowest among its alternatives w.r.t. some scale R. Since  $C_{neg}$  must satisfy both (i) and (ii), the result could be an empty set.

Consider [\$50 jiu is sufficient]: (i) requires Cneg to be {\$30 is sufficient, \$40 is sufficient,...}, while (ii) requires  $C_{neg}$  to be {\$60 is sufficient, \$70 is sufficient,...}; thus, Cneg is empty and the sentence involves a non-exclusive jiu.

Further, the presupposition in (ii) brings an evaluative *low-rank* reading to jiu's associate, because compared to its alternatives, it is the lowest. Since (ii) also poses a requirement on  $C_{neg}$  which affects the availability of exclusive readings, we predict a connection between low-rank readings and exclusive readings. In the paper, we show this prediction is correct.

Finally, non-exclusive uses of *jiu* are restricted to non-topic positions. This is because topical associates of *jiu* are contrastive topics, which carry anti-exhaustive presuppositions, thus incompatible with an exclusive reading.

# T in Mandarin: From the Perspective of Negation

Nan Li (Cornell University) Friday, April 11<sup>th</sup>, 3:15 PM – 3:45 PM, East Lounge (2<sup>nd</sup> floor)

This paper contributes to the debate whether or not a functional T(ense) head exists in clause structure of Mandarin Chinese from the perspective of negation. It is shown that aspect-as-tense approach to temporal interpretation in Mandarin as proposed in Lin (2006) among others runs into problems when negative sentences are taken into account (cf. Teng 1973). Based on semantic properties, a new classification of negation markers in Mandarin is proposed: sentences with sentential negation marker 沒有 /méiyǒu/ ('not.R') describe non-existence of an episodic eventuality which is compatible with either a past or present temporal interpretation; sentences with sentential negation marker 不 /búhuì/ (not.IR will) deny a possibility of existence of an episodic eventuality which is compatible with a future temporal interpretation; sentences with /bù/+VP give a generic reading which is compatible with all three temporal interpretations. These three negation markers show systematic distributional differences:  $\pi$  bù, but neither méiyŏu or búhuì, can appear in the complement of verbs such as zhǔnbèi ('to prepare') or shèfă ('to try') (cf. Huang 1982/1998), in purpose clauses, as part of subject, or in raising constructions (Li 1990). To account for these distributional differences, T is proposed in Mandarin, and the two negation markers méiyǒu and búhuì, but not bù, are argued to be under T. It is shown that this structural proposal is compatible with several language-internal phenomena such as adverb distributions and two readings of zenme ('how') (Tsai 2008).

# Aktionsart and the Aspectual Composition of Stative Passives

Alfredo Garcio-Pardo (University of Southern California) Friday, April 11<sup>th</sup>, 4:00 PM – 4:30 PM, East Lounge (2<sup>nd</sup> floor)

Adjectival/stative passives have two distinct readings depending on the inner aspect of the underlying VP: a resultative reading if the base VP is telic (e.g., *The glass is broken*), and a non-resultative, eventuality-in-progress reading if the base VP is either a D-sate (e.g., *The diamond is protected*) or an extent state that relates two objects in space (e.g., *The village is surrounded by mountains*), both types being atelic and non-dynamic. Also, VPs denoting activities and states are out/ degraded as inputs for the stative passive (e.g., *Mary is loved*, *The cradle is rocked*). We provide data from Spanish, German and Hebrew that illustrate these facts.

We propose that adjectival passives require a VP that contains a non-central coincidence relation, understood as introducing two arguments that do not coincide in spatio-temporal terms (cf. Hale & Keyser 2002). We further argue that extent-states and D-states are built from the same stative non-central coincidence PP, which accounts for their same basic aspectual meaning. Telics here are assumed to have a resultant state in their decomposition. We finally propose that the adjectival passive operator retrieves the lower state within the VP and delivers a predicate of states. This explains why the (non-)resultative meaning depends on the aspectual composition of the underlying VP, as well as why activities and pure states are out (the former do not have a stative component and the latter are a central-coincidence relation).

# Two Aspectual Puzzles in Saisiyat

Peter Guekguezian (University of Southern California) Friday, April 11<sup>th</sup>, 4:30 PM – 5:00 PM, East Lounge (2<sup>nd</sup> floor)

The Saisiyat postverbal aspectual particle [ila] displays two puzzling behaviors. First, [ila] is ambiguous between an inchoative and a universal perfect reading with states and activities. Second, accomplishments and achievements in Saisiyat do not necessarily give culminative readings with the overt perfective marker [ina], but they necessarily do with [ila]. I argue that the basic meaning of [ila] is a perfect marker, which combines freely with lower viewpoint aspect operators; the ability of [ila] to combine with these other markers shows that [ila] occurs in a higher head position. Telicity is not always encoded independently by the predicate in Saisiyat, but by an independent syntactic head required by [ila]. This telic head guarantees culminative readings with accomplishments and achievements and derives inchoatives from states and activities. The ambiguity of [ila] with these derived inchoatives is due to the presence of covert viewpoint aspect operators. Following Iatridou et al (2001), I argue that [ila] sets up a Perfect Time Span (PTS), whose Right Boundary (RB) is the reference time and Left Boundary (LB) is set by an (overt or covert) temporal adverbial. Covert neutral and imperfective viewpoint aspect operators relate the situation time and its boundaries to the PTS. With the neutral operator, the initial endpoint of the situation and at least one following point are within the PTS, giving the inchoative reading "became X." With the imperfective operator, both endpoints of the state resulting from the inchoative occur outside the PTS, giving the universal perfect reading "has been X."

GENERAL SESSION: SYNTAX

#### Count-mass Nouns, Inherent Number, and the Unmasking of an Imposter

Peter Smith (University of Connecticut) Saturday, April 12<sup>th</sup>, 8:30 AM – 9:00 AM, West Lounge (2<sup>nd</sup> floor)

I argue that count-mass nouns (grammatically mass nouns which are interpreted more like count nouns) like *furniture*, *jewelry*, *silverware* are not mass nouns in English, contrary to common assumption. I argue that the properties that make them appear to be mass nouns, such as an inability to be counted or combine with plural morphology, as well as their combination with 'mass quantifiers', such as *much* and *little* (as opposed to *many* and *few*) all result from their having an inherent specification for semantic plurality. I show that inherent number in English causes issues for counting, as seen with *pluralia tantum* which also resist counting \**three jeans*. Inherent number (taken here to lie on *n* that merges with the root), prevents number features on NumP from combining with the root. Since, numerals merge in the specifier of NumP (Watanabe 2010), count-mass nouns cannot be counted, nor can they receive morphological plurality, which not being inherent to the root, can only be introduced in NumP. Quantifier selection is treated as allomorphy; the count quantifiers in

Enlgish many and few realize the roots  $\sqrt{\text{MANY}}$  and  $\sqrt{\text{FEW}}$  it combines with a noun that has morphological number, whilst  $\sqrt{\text{MANY}}$  and  $\sqrt{\text{FEW}}$  are spelled out as *much* and *little* in combination with a noun that lacks morphological number. The role of inherent number in all this is further shown by novel data from comparatives, which shows count-mass nouns and *pluralia tantum* having a closer relationship to their classifier than true mass nouns.

# Feature Geometry and the Person Case Constraint: An Algebraic Link

Thomas Graf (Stony Brook University)
Saturday, April 12<sup>th</sup>, 9:00 AM – 9:30 AM, West Lounge (2<sup>nd</sup> floor)

Person Case Constraints (PCCs) have attracted a lot of attention in the last few years (Nevins 2007, Walkow 2012, among others). These constraints regulate the co- occurrence of direct object and indirect object clitics depending on their person specification, as is illustrated below for French:

Roger le/\*me leur a presénté. Roger him/me them has shown 'Roger showed me/him to them.'

Building on formal insights from Graf (2011) and Kobele (2011), I argue that it isn't the existence of PCCs that is surprising from a Minimalist perspective but rather that only 4 out of 64 possible PCC variants are attested. I then show that the four attested variants form a natural class from an algebraic perspective if one takes into account the internal complexity of person features.

More precisely, person is assumed to be represented by a bundle of features, following feature geometric approaches such as Harley and Ritter (2002) and Nevins (2007). The structural complexity of these bundles then establishes a base hierarchy of person features, and the class of attested Person Case Constraints is identified with the class of person hierarchies that do not contradict said base hierarchy in a specific technical sense.

# Case and Agreement in Cupeño: Morphology Obscures a Simple Syntax

Theodore Levin and Ryo Masuda (MIT) Saturday, April 12<sup>th</sup>, 9:30 AM – 10:00 AM, West Lounge (2<sup>nd</sup> floor)

Cupeño (extinct Uto-Aztecan; California) displays case and agreement morphology patterns conditioned by tense: subject clitics and subject verbal agreement are in complementary distribution. The former is only realized in non-past tense and display ergative-absolutive alignment (1). The latter is only realized in past tense and displays a nominative-accusative alignment (2). Examples are from Hill (2005).

(1) a. na-nxalu've-l-im=**el** puy-we DUP-old.man-NPN-PL=**3pl.ABS** dine-PRPL

'The old men are dining.'

- b. pem-s]áwi=**me** kwa-we 3pl-bread=**3pl.ERG** eat-PRPL 'They are eating bread.'
- (2) a. het-**pe**-yax crouch-3sg.**NOM**-yax 'He crouched.'
  - b. pe-shúun-i kulu-lu-pe-n-ngiy
     3sg-heart-OBJ drag-RED-3sg.NOM-in-motion.going.away
     'He went away dragging his heart.'

In this talk, we argue that this distribution does not arise due to variation in syntactic structure, as has been suggested for aspect-based ergativity splits (Salanova 2007, Coon 2010); rather, the regular output of the syntactic derivation is subject to morphological constraints that obscure the syntax of the language – clitic and agreement morphology are both sensitive to tense specification, giving the illusion of a syntactic deviation conditioned by tense. Contrary to previous analyses (Barragan 2003, Hill 2005), we conclude that Cupeño exhibits a uniform tripartite case system that is reflected in its person-number clitics and consistent nominative-accusative agreement. The data and analysis bears on integrated morphological theories such as Distributed Morphology (DM) in which morphological alternations need not be captured by architectural variation in the narrow syntax.

Special Session: Probabilistic Methods

# Modelling the Lenis-fortis Contrast in Saulteaux Using Multivariate Loglinear Regressions

Adam Tallman (University of Texas at Austin) Saturday, April 12<sup>th</sup>, 8:30 AM – 9:00 AM, East Lounge (2<sup>nd</sup> floor)

This paper has two intersecting goals. One is to provide a statistical and quantitative description of the acoustic correlates of lenis and fortis stop phonemes in Saulteaux. The other goal to analyze the lenis-fortis contrast in this language using probabilistic modelling, specifically logistic regressions. Four acoustic correlates were coded; consonant duration, postaspiration, preaspiration, and voicing. Data from six speakers of Saulteaux-Ojibwe from different communities in Manitoba based on naturalistic speech and elicited words was used (cf. Tallman 2011 for a detailed account of the data and methodology). The main empirical finding of the study is that there is ubiquitous variation between the speakers in terms of strong each of the correlates co-vary and predict the lenis-fortis contrast.

Literature on phonetic typology has demonstrated that where phonetic distance or contrast is diminished in one phonetic dimension it is increased in phoneme contrast (Engstrand & Krull 1994, Pierrehumbert 2003, Kirby 2011). Based on these findings I advance the hypothesis that although contrast strength along each particular phonetic parameter may vary from speaker to speaker, the overall contrast between phonemes when dimensions are taken together tends to be closer. I discuss some ways that this hypothesis might be assessed. I argue that contrast between correlates can

be modelled using multivariate bias-reduced log-linear regressions (Kosmidis 2011). A number of ways to summarize overall contrast based on the logit model are discussed ( $R^2$ ,  $\tau$ , accuracy, slope; cf. Kendall & Gibbons 1990, van Rijsberger 1979, Gelman & Hill 2007). The importance of this research for typologically orientated descriptive work is also discussed.

# What is Most Useful to Know? Information and Mongolian Vowel Harmony

Gallagher Flinn (University of Chicago) Saturday, April 12<sup>th</sup>, 9:00 AM – 9:30 AM, East Lounge (2<sup>nd</sup> floor)

This talk explores the applicability of using the minimal description length principle to make phonological generalizations.

Taking a corpus of Khalkh Mongolian built from news and Wikipedia texts, I show that the cost in bits for encoding a corpus is a reliable way to divide vowels by harmonic features.

Following methods developed in Goldsmith and Riggle (2012), it is possible to model a language's phonology as a weighted finite state automaton (wFSA), where edges are weighted with the conditional probabilities that a pair of segments will co-occur.

Words in a corpus can then be represented as paths through the wFSA, where the product of a path's edge weights is the probability that the model assigns to a given word.

By treating these probabilities as the number of bits necessary to encode a given outcome, the success of a model is measured in terms of how few bits it requires to describe a corpus and the question can be posed, "In terms of bit cost, what is the most useful single distinction to make between vowels in Mongolian?"

This is accomplished by exhaustively comparing a group of wFSAs, each of which is only sensitive to one of the logically possible two-way distinctions between vowels.

Here the most efficient of these models is shown to be the one that accurately partition vowels on the basis of a pharyngeality feature, one of the two dimensions along which vowel harmony in Mongolian applies.

# Holds or Transitions: Which is More Important?

Jonathan Keane (University of Chicago) and Leah Geer (University of Texas at Austin) Saturday, April 12<sup>th</sup>, 9:30 AM – 10:00 AM, East Lounge (2<sup>nd</sup> floor)

Using a novel approach, we examine which temporal parts of American Sign Language (ASL) finger-spelling, holds or transitions, allow for more successful comprehension by students learning ASL. Seventeen ASL students at the University of Texas at Austin participated in this study. They were shown video clips of a native signer fingerspelling common English words. Clips were modified: all were slowed down to half speed, one-third of the clips were modified to black out the transition portion of the fingerspelling stream and one-third modified to have holds blacked out. The remaining third of clips were free of blacked out portions, which we used to establish a baseline of comprehension. Research by Wilcox (1990), among others, suggested that transitions provide more rich information, and thus items with the holds blacked out should be easier to comprehend.

This was not found to be the case here. Students achieved higher comprehension scores when hold information was provided. Results and materials from this project can be used to design training tools to help students become more proficient at fingerspelling comprehension, a skill with which most students struggle.

Special Session: Information Structure

# Anaphoric Clefts: The Myth of Exhaustivity

Carl Pollard and Murat Yasavul (Ohio State University) Saturday, April 12<sup>th</sup>, 11:30 AM – 12:00 PM, West Lounge (2<sup>nd</sup> floor)

We argue against the widespread assumption (Horn, 1981; Buring, 2011b), inter multa alia, that anaphoric it-clefts (i.e., those whose post-focus constituent is de-accented or ellipsed) give rise to an exhaustivity implication. We propose that anaphoric it-clefts are used to further specify an antecedent discourse referent (DR) that the speaker considers to be insufficiently identified. We claim that an exhaustivity implication only arises when such clefts are used to answer wh-questions. On our account of questions, a dynamic adaptation of the ideas in Hamblin (1957; 1971; 1973), a wh-question introduces a DR for the maximal (possibly empty or singleton) group of individuals with the property in question. We implement our dynamic analysis in an extension of Dynamic Categorial Grammar (Martin, 2013) with a Topics under Discussion (TUD) stack. The TUD stack plays a role analogous to that of a QUD stack (Ginzburg, 1994; Roberts, 1996) and, in particular, specifies which DRs remain to be identified. The dynamic meaning of a question pushes the DR above onto the TUD stack. As the dynamic meaning of an anaphoric it-cleft that answers a question has this DR as its antecedent, and identifies this DR with the denotation of the focused expression, the appearance arises that the it-cleft itself is contributing an exhaustivity implication.

# Topics in Isthmus Zapotec Information Structure

Juan José Bueno Holle (University of Chicago) Saturday, April 12<sup>th</sup>, 12:00 PM – 12:30 PM, West Lounge (2<sup>nd</sup> floor)

This paper examines topic marking in Isthmus Zapotec, an Otomanguean language spoken by approximately 50,000 people in southeastern Oaxaca, Mexico. In particular, I focus on a salient but elusive property of naturally-occurring speech in ZAI, the use of the  $l\acute{a}$  particle.

The  $l\acute{a}$  particle carries a H tone, occurs only at the end of an intonation unit, and serves the following three main discourse functions: a) it consistently appears at the end of sentence-initial adverbial clauses and conditionals, i.e., in a frame-setting or delimiting function, and b) it may signal changes in topic or boundaries of topical units, i.e., as a contrastive topic marker, and c) it marks yes/no questions.

What these functions have in common is to establish background presuppositions—often through pragmatic accommodation— and to establish a framework within which to proceed with a dis-

course, in the same way that a question does. This is consistent with what has been found cross-linguistically, namely, the common morphological properties between interrogatives and conditionals on the one hand (Konig & Siemund 2007: 296), and between conditionals and topics on the other (Haiman 1978).

This paper thus has three goals. First, based on original field data, I show the range of discourse functions the  $l\acute{a}$  particle is involved in. Second, I move toward a more complete account of the multifunctional nature of the  $l\acute{a}$  particle and its place within the system of topic marking in ZAI. Finally, I address the place of the  $l\acute{a}$  particle in typological perspective.

# Focus-movement as Last Resort: Evidence from Bangla

Saurov Syed (University of Southern California) Saturday, April 12<sup>th</sup>, 12:30 PM – 1:00 PM, West Lounge (2<sup>nd</sup> floor)

Ever since Chomsky (1970)'s idea that different phrases like NP, VP, AP, PP, have the same internal structure, symmetry has always been sought in generative grammar. A lot of research has been done in the field on the parallelism between the nominal and the clausal domain, arguing that DP is the nominal counterpart of CP (cf. Abney 1987, Szabolcsi 1987, Stowell 1991). There is an ongoing debate, however, about how information structure is coded in the nominal domain, if at all. There have been two approaches to account for interpretational differences that arise from reordering of materials within the DP: focus movement has been argued in the nominal domain for a number of languages on one hand (See Aboh 2004 for Gungbe, Cardinaletti 1998 for Italian, Siewierska and Uhliróva 1998 for Polish, Ntelitheos 2004 for Greek, Rijkhoff 1998 for Turkish, among many others), whereas a base generation view is adopted on the other (Szendroi 2010 among others). First, this paper shows limitations of a base-generation approach when it comes to data from Bangla, and argues for a DP-internal focus movement. Then the paper discusses other strategies that exist in the Bangla nominal domain (besides movement) to focus an element, namely by focusing in-situ, and addition of the focus marker –i; it is argued that movement for focus reasons happens within the DP only as the last resort, when other strategies are not available to signal focus.

GENERAL SESSION: MORPHOLOGY

Network Morphology and Paradigm Signatures: Modeling Variation in Verb-agreement Categories in Split-ergative Alignment Systems

Andrew Hippisley and Gregory Stump (University of Kentucky) Saturday, April 12<sup>th</sup>, 11:30 AM – 12:00 PM, East Lounge (2<sup>nd</sup> floor)

The modern Iranian languages exhibit a drift from split-ergative alignment toward fully accusative alignment but vary according to (a) whether they preserve case and/or gender as verb-agreement categories and (b) the dependencies that exist among their verb-agreement categories. Verbs in Kurmanji Kurdish do not inflect for gender, and the agreement categories of person, number and

case exhibit two dependencies: verb inflection (i) expresses an agreement target's person only in the singular, and (ii) expresses a target's case only in the third person singular. In Network Morphology, the realization of a word form's morphosyntactic property set  $\{\alpha, \beta, \gamma\}$  depends on a particular linear path ordering  $<\alpha\beta\gamma>$  of the properties in that set: any rule formulated as realizing the initial subpath  $<\alpha>$  of  $<\alpha\beta\gamma>$  is applicable in the realization of  $<\alpha\beta\gamma>$  itself, but is overridden by any rule formulated as realizing a longer initial subpath  $<\alpha\beta>$  of  $<\alpha\beta\gamma>$ . The pattern P of split ergativity observed in Pashto verb agreement differs in two ways from the pattern K observed in Kurmanji Kurdish verb agreement: (i) P is conditioned by properties of person, number, case and gender while K is only conditioned by properties of person, number and case; and (ii) P involves paths in which properties of person precede properties of number, while K involves paths with the reverse ordering. A cross-linguistic comparison of such *paradigm signatures* teases apart variation in feature content from variation in feature precedence, thereby crucially revealing the language's specific trajectory from split-ergative to fully accusative alignment and suggestive of 'possible trajectory'.

# Relative Clauses in Bavarian: A Distributed Morphology Approach to Morphosyntactic Variation

Jonathan Havenhill (Georgetown University) Saturday, April 12<sup>th</sup>, 12:00 PM – 12:30 PM, East Lounge (2<sup>nd</sup> floor)

This paper provides a Distributed Morphology (DM) account of relative pronoun omission in Bavarian, which exhibits intraspeaker variation, yet is possible only under specific morphosyntactic contexts. As in (1), relative clauses in Bavarian are typically introduced by a relative pronoun (d-pronoun) and a relative complementizer, wo. However, a d-pronoun may be omitted when it is local to its antecedent if it a) matches its antecedent in case, or b) is either nominative or syncretic with the nominative.

(1) I hob des Audo, (des) wo er g'kauft hod, g'fahrn. I have the.N.ACC car, which.N.ACC that er bought has, driven 'I drove the car that he bought.'

I propose that d-pronoun omission is the insertion of a phonologically null Vocabulary Item, which is the elsewhere case that is inserted as a result of Impoverishment. However, deriving the distribution of Bavarian d-pronouns is problematic for categorical Impoverishment as standardly assumed in DM. Thus, I adopt Nevins & Parrott's (2010) variable Impoverishment approach. Two Impoverishment rules are necessary to derive the data. The first deletes case features on the D node when they match those of the antecedent, while the second deletes the [-oblique] feature on nominative and accusative d-pronouns. When one of these rules applies, no overt Vocabulary Item is eligible for insertion, resulting in null exponence. Because silent and overt d-pronouns are indistinguishable based on features alone, approaches relying on featural specifications, such as Adger & Smith (2010), are unable to derive the Bavarian patterns.

# Root Allomorphy in Ranmo (Papuan)

Jenny Lee (Harvard University) Saturday, April 12<sup>th</sup>, 12:30 PM – 1:30 PM, East Lounge (2<sup>nd</sup> floor)

In DM root allomorphy is treated as competition between Vocabulary Items subject to a strict locality constraint (e.g., Bobaljik & Harley 2013). In this talk, I present new data from a typologically unrelated language, Ranmo (Papuan), in support of this generalization and discuss their implications for the syntax of Ranmo verbs. First, I show that the subjects of absolutive-marking intransitive verbs and the objects of transitive verbs condition allomorphy to the exclusion of transitive subjects. Second, I deal with a class of intransitive verbs that seem to constitute prima facie counterexamples, i.e., those that show subject agreement morphology (in addition to "middle" morphology)—apparently giving rise to an ergative split—yet show number-conditioned root allomorphy. A close examination of their morphosyntactic properties reveals that in fact, they cannot be analyzed as projecting an (underlying) external argument. Rather, they take a DP complement, and the subject agreement morphology only surfaces when this argument raises to fill Spec,vP, which in turn triggers the postsyntactic insertion of an AGR node. The proposed analysis captures the distribution of "middle" morphology limited to this class in a way that unifies a range of disparate constructions reflexives, anticausatives, and (semantic) unergatives—under a common structural factor, namely, the availability of A-movement, and indirectly provides support for the argument that there are no unergative verbs as such in Ranmo. The licensing of root allomorphy in all syntactic constructions, then, is seen as a consequence of the proposal that all Ranmo verbs take a complement (cf. Coon 2010).