



Berkeley Linguistics Society

36th Annual Meeting

February 6 & 7, 2010

Berkeley, California

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## Acknowledgements

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- UC Berkeley Department of Linguistics
- UC Berkeley Graduate Assembly
- UC Berkeley Social Sciences Division
- UC Berkeley Student Opportunity Fund
- International Computer Science Institute (ICSI)

BLS would also like to thank Dieter Stein and the Linguistic Society of America (LSA) for helping us arrange access to much of the past BLS Proceedings via eLanguage. We look forward to our continued collaboration!

The current BLS Executive Committee would also like to thank all the members of recent past Executive Committees who have lent their expertise and given their guidance to us – without their words of wisdom, the meeting would not run nearly as smoothly.

BLS also heartily thanks all the student volunteers who have given their time to help make this meeting a success, whether through reviewing abstracts or volunteering at the meeting itself. We also wish to thank all those who submitted abstracts and who have come to present their work to all of us!

Finally, BLS thanks all the speakers of the languages presented at this conference who have kindly provided us with words and utterances without which we could do none of the work we love.

*BLS 36 Executive Committee*

Jessica Cleary-Kemp, Clara Cohen, Stephanie Farmer, Laura Kassner, John Sylak, and Melinda Woodley.

## Schedule

### Saturday, Feb. 6 (Day 1)

7:45 am Registration & Coffee – 371 Dwinelle

8:15 Opening Remarks – 370 Dwinelle

370 DWINELLE

3335 DWINELLE

#### Syntax I

#### Phonetics

8:30 Youssef A. HADDAD : *Expletive control in Telugu* Caleb EVERETT : *Semantically-oriented vowel reduction in an Amazonian language*

9:00 Caitlin LIGHT : *Subject relatives and expletives in Early New High German* Polina VASILIEV & Paola ESCUDERO : *A psychoacoustic correlate for phonological vowel height? Testing Syrdal & Gopal's model with Brazilian Portuguese vowels*

9:30 Xabier ARTIAGOITIA : *Basque genitive case and multiple checking* Ioana CHITORAN & Egidio MARSICO : *Vowel devoicing: An updated phonetic typology*

10:00 Hrayr KHANJIAN : *Negative concord in Western Armenian* Hijo KANG : *Position and height asymmetries in hiatus resolution: A case study of Korean VV sequences*

10:30 Break – 371 Dwinelle

10:45 RICHARD SPROAT – 370 Dwinelle  
*Some Common Misconceptions about Writing Systems and Symbol Systems*

11:45 Lunch (see p. 7 for nearby options)

#### Semantics

#### Psycholinguistics

12:45 pm Yasutada SUDO : *Person restrictions in Uyghur indexical shifting* Josita MAOUENE, Nitya SETHURAMAN, Mounir MAOUENE, & Linda B. SMITH : *An embodied account of argument structure development*

1:15 Nancy HEDBERG & David POTTER : *Equate and predicational copulas in Thai* Wojciech LEWANDOWSKI : *The source-goal asymmetry in SLA*

1:45 Jidong CHEN : *Putting and taking events in Mandarin Chinese* – Cancelled – Cao YONGHENG : *The processing of English spatial and temporal relations by advanced Chinese EFL learners*

2:15 Break – 371 Dwinelle

2:30 PETER T. DANIELS – 370 Dwinelle  
*Writing in the World and Linguistics*

3:30 Break – 371 Dwinelle

370 DWINELLE

3335 DWINELLE

Parasession : **Writing Systems and  
Orthography**

**Historical**

3:45 Hui-wen CHENG & Catherine CALDWELL  
-HARRIS : *Orthography shapes semantic  
and phonological activation in reading*

Katarzyna JANIC : *On the reflexive-  
antipassive polysemy: Typological conver-  
gence from unrelated languages*

4:15 Grant L. MCGUIRE : *Orthographic effects  
on attention to phonetic cues*

Reijirou SHIBASAKI : *From relativiza-  
tion to nominalization and more: Evidence  
from the history of Okinawan*

– Parasession continued –

**Pragmatics**

4:45 Wilson SILVA & Kristine STENZEL : *Em-  
powering language speakers to develop  
their own orthography: Two case studies*

Mark DINGEMANSE : *How to do things  
with ideophones*

5:15 Christopher MILLER : *Transfer and con-  
tact phenomena in the genesis of the  
Philippine-Indonesian Baybayic scripts*

Hannah PRITCHETT & Alice GABY : *A  
dynamic typology of wanting in Australian  
languages*

5:45 Andrew DOMBROWSKI : *When is orthog-  
raphy not just orthography? The case of  
the Novgorod birchbark letters*

– Cancelled – Gregory WARD, Christopher  
AHERN, & Tom HAYDEN : *An empirical  
investigation of typicality and uniqueness  
effects on article choice*

6:15 Break – 371 Dwinelle

6:30 JEAN-MARIE HOMBERT – 370 Dwinelle  
*Language Isolates and Linguistic Diversity:  
A Case for a Mosaic Approach to Language Emergence*

7:30 Wine & Cheese – 371 Dwinelle

8:15 BLS Dinner Party – 370 Dwinelle

— End of BLS Day 1 —

## Sunday, Feb. 7 (Day 2)

8:00 am

Coffee etc. – 371 Dwinelle

370 DWINELLE

3335 DWINELLE

### Phonology

### Sociolinguistics

- |       |  |   |
|-------|--|---|
| 8:30  | Hyun-ju KIM : <i>Emergent hidden grammar: Stochastic patterning in Korean accentuation of novel words</i>  | Cala ZUBAIR : <i>Diglossia versus register: Discursive classifications of two Sinhala varieties</i>                               |
| 9:00  | – Cancelled – Sverre Stausland JOHNSEN : <i>Neighborhood density in phonological alternations</i>          | Sharon Miriam ROSS & Ila NAGAR : <i>Jack and Jill: Early emergence of discrimination between male- and female-directed speech</i> |
| 9:30  | Morgan SONDEREGGER : <i>Testing for frequency and structural effects in an English stress shift</i>        | Satoshi NAMBU : <i>A quantitative analysis of the nominative/genitive alternation in Japanese</i>                                 |
| 10:00 | James D. Y. WHANG : <i>Perception of illegal contrasts: Japanese adaptations of Korean coda obstruents</i> | Johnny GEORGE : <i>Universals in the visual-kinesthetic modality: Politeness marking features in Japanese Sign Language (JSL)</i> |

10:30

Break – 371 Dwinelle

10:45

LYLE CAMPBELL – 370 DWINELLE  
*Language Isolates and Their History, or, What's Weird, Anyway?*

11:45

Lunch (see p. 7 for nearby options)

### Special Session : **Language Isolates and Orphans**

### **Syntax II**

- |          |   |   |
|----------|---|---|
| 12:45 pm | Tyler SCHNOEBELEN : <i>(Un)classifying Shabo: Phylogenetic methods and the Basque of Africa</i>                         | Ankelien SCHIPPERS : <i>Partial wh-movement and wh-copying in Dutch: Evidence for an indirect dependency approach</i> |
| 1:15     | Edward VAJDA : <i>Metathesis and reanalysis in Ket</i>  | Brian AGBAYANI, Chris GOLSTON, & Dasha HENDERER : <i>Movement of phonological constituents</i>                        |
| 1:45     | Lev MICHAEL : <i>The Pre-Columbian origin of a 'diachronic orphan': The case of Omagua</i>                              | Max BANE : <i>A combinatoric model of variation in the English dative alternation</i>                                 |
| 2:15     | Guillaume SEGERER : <i>Some hypotheses about possible isolates within the Atlantic branch of the Niger-Congo phylum</i> | David POTTER : <i>A sister-precedence approach to the linearization of multiple dominance structures</i>              |

2:45 Break – 371 Dwinelle

3:00 JOHN MCCARTHY – 370 DWINELLE  
*Harmonic Serialism in Optimality Theory*

4:00 Break – 371 Dwinelle

370 DWINELLE

3335 DWINELLE

**Cognitive Linguistics**

**Morphology**

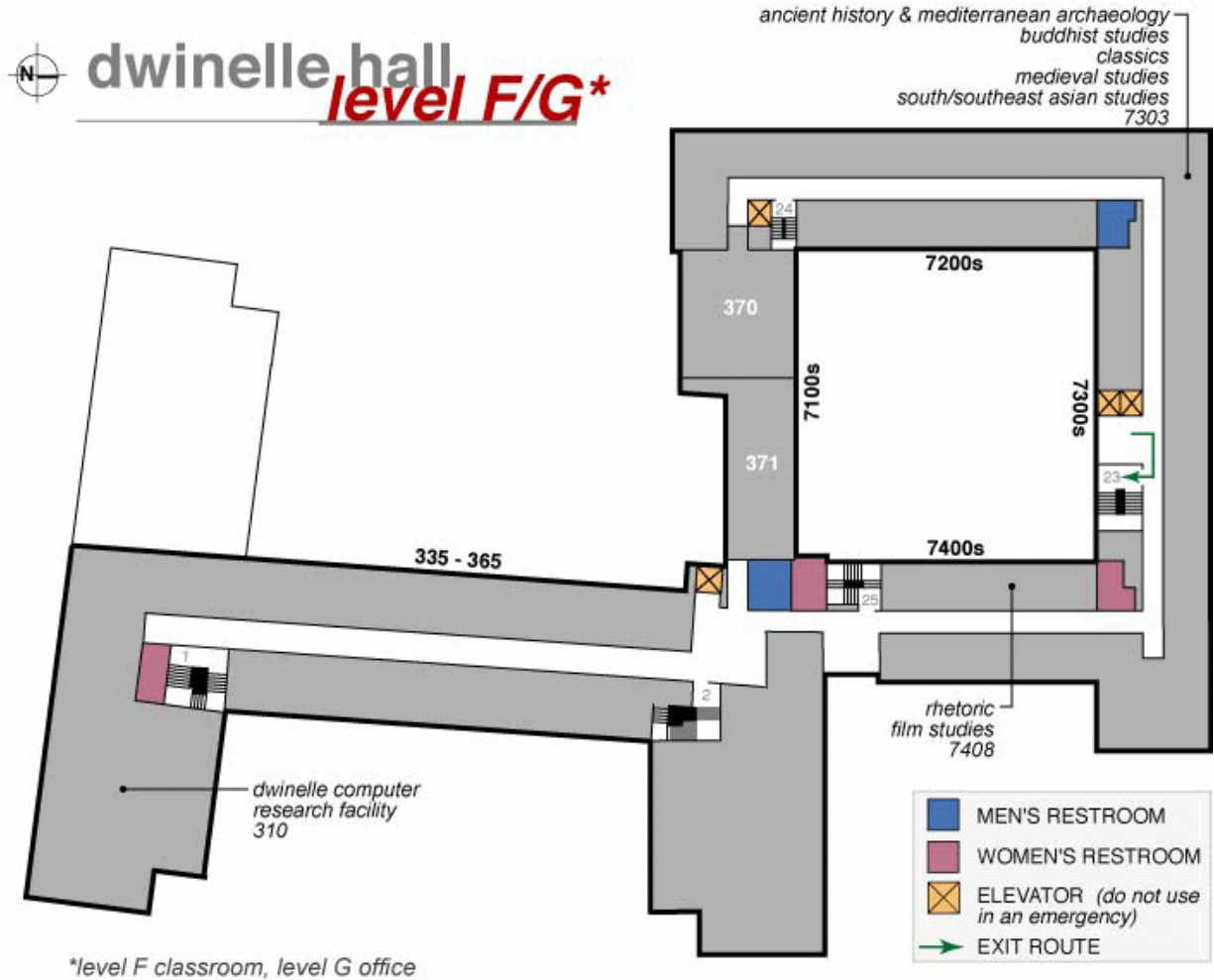
- |      |   |  |
|------|---|--|
| 4:15 | Kazuko SHINOHARA & Shigeto KAWAHARA : <i>A cross-linguistic study of sound symbolism: The images of size</i>  | James SLOTTA : <i>Multifunctionality and inalienability: Propositional and discourse functions in Yopno possessive constructions</i> |
| 4:45 | Iksoo KWON : <i>Evidentiality in Korean counterfactual conditional constructions</i>  | Amy CAMPBELL : <i>A typology of discontinuous exponence</i>  |
| 5:15 | Teresa ELMS : <i>Gesture-to-speech mismatch in the construction of problem-solving insight</i>  | Tom RECHT : <i>Loanword-effected morphological restructuring in the Hebrew verb system</i>   |
| 5:45 | Nathan SCHNEIDER : <i>Computational cognitive morphosemantics: Modeling morphological compositionality in Hebrew verbs with Embodied Construction Grammar</i> | Young Ah DO : <i>Satisfying output-output faithfulness with excessive morphology: Evidence from Korean acquisition</i>               |

6:20 Closing Remarks – 370 Dwinelle

– End of BLS 36 –



## Conference Venue : Dwinelle Hall



Please enter Dwinelle Hall from the main, front entrance near Sather Gate. Upon entering, take a right and walk to the elevator, which will be on your left. Take this to Level F and make a U-turn upon arriving and you will enter room 371. The immediately adjacent room, 370 Dwinelle, is the room in which talks will be held.

## Nearby Restaurants & Coffeeshops

### Lunch Restaurants Bordering Campus

**La Val's** : Euclid Avenue just north of campus through the North Gate. \$3.50 lunch special for a slice of pizza and soda. Also good pasta made to order, many varieties of pizza by the slice, and salads.

**Sunrise Deli** : Across from Lower Sproul Plaza on Bancroft Way a five minute walk from Dwinelle. Great, fresh middle-eastern cuisine. Try the vegetable combo or the falafel if in doubt.

**Musical Offering** : Across from Lower Sproul Plaza on Bancroft Way a five minute walk from Dwinelle. Very good sandwiches with a full cafe offering of drinks. A little pricier and classier than the normal student hang-outs.

**La Burrito** : Euclid Avenue just north of campus through the North Gate. Shares space with La Val's. Good, cheap Mexican food with free, house-made chips and a variety of salsas.

**GENERAL AREAS** : You'll find many, many more options around Euclid & Hearst north of campus (through North Gate) and Telegraph Ave immediately south of campus (continue out through Sather Gate).

### Coffeeshops

**The Free Speech Movement Cafe** : Housed inside the Moffitt Undergrad Library a short walk from Dwinelle. Good coffee, lattes, espressos, etc. Also available are juices and soda. The pastries are good and reasonably priced (we recommend the Espresso Brownie, the Apple Cloud, and the Carrot Cake). This is a good place to hang out, relax, and get a feel for UC Berkeley.

**Cafe Milano** : Slightly uphill from Telegraph Ave & Bancroft Way. Offers a wide variety of drinks in addition to pastries and sandwiches. Find a spot on the second floor to stay and relax to classical music.

**Brewed Awakening** : On Euclid Ave just north of campus. Wide variety of coffee drinks, fruit juices, smoothies, as well as pastries and sandwiches. Also a good spot to sit and stay awhile.

**Cafe Mattina** : Formerly "Cafe Intermezzo," this spot on Telegraph Ave near Haste St serves great sandwiches, salads (esp. the Veggie Delight), and a variety of fresh coffee.

### Bars and Restaurants in Downtown Berkeley

**Jupiter** : On Shattuck Ave between Center St & Allston Way. A gastropub with great pizza and in-house brewed beers. Beautiful interior and courtyard space in back with a firepit.

**Triple Rock** : On Shattuck Ave near Hearst St. This is a classic bar that serves a variety of beers including its own homebrews. Good burgers in addition.

**Bobby G's Pizzeria** : At the intersection of Shattuck Ave & University Ave. A casual, cheaper spot with wonderful made-to-order pizzas or pizza by the slice. Full bar and many rarer non-alcoholic beverages as well. Will be heavily crowded and loud during the Superbowl!

**Beckett's** : On Shattuck Ave just north of Bancroft Way. This Irish pub serves a variety of beers including Belgian whites along with its famous garlic fries and classic bangers and mash.

**THE GOURMET GHETTO** : Slightly far from campus on Shattuck Ave between Hearst St & Rose St, this area is famous for its upscale dining. Around Shattuck & Vine St are the legendary Cheeseboard (not open Sunday) and Chez Panisse, as well as many other great restaurants.

## Copy Shops

**Zee Zee Copy** : on Durant Ave 1 block downhill from Telegraph Ave. 510-705-8411. Open 10a-7p.

**Copygrafik** : On Fulton St between Bancroft Way & Kittredge St. 510-843-5251. 2.5 cents per black & white page.

**Copy Central** : on Bancroft Way 1 block uphill from Telegraph Ave. 510-848-8649. Open 10a-6p Saturday, 10a-8p Sunday.

## Bookstores

**Moe's** : 2476 Telegraph Ave. (510) 849-2087. General; new and used books, including linguistics and foreign languages. Open 10a-11p.

**Pegasus Books** : 1855 Solano Ave. (510) 525-6888. Large selection of used books and magazines (foreign and domestic). Second location at corner of Durant & Shattuck has smaller selection. Open Fri-Sat 9a-10:45p, Sun 10a-10p.

**University Press Books** : 2430 Bancroft Way. (510) 548-0585. Devoted to new and used books published by more than 100 University Presses. M-F 10a-8p, Sat 10a-6p, Sun 12p-5p.

**Ned's Berkeley Bookstore** : 2480 Bancroft Way & Telegraph. (510) 204-0900. New and used books; primarily textbooks. F 9a-5p, Sat-Sun 10a-5p.

**ASUC Bookstore** : MLK Student Union Building, UC Berkeley campus. (510) 642-7294. General selection of books, including linguistics, philosophy, foreign languages. Located at the corner of Bancroft and Telegraph. Open Sat 10a-6p, Sun 12p-5p.

**Turtle Island Booksellers** : 2041 Center St, 1/2 block from Berkeley BART. Also at 3032 Claremont & Prince. (510) 655-3413. Out-of-print, rare, and unusual scholarly books. Open Tu-Sat 10:30a-6p.

**Half Price Books** : 2036 Shattuck Ave. (510) 526-6080. New and used books, magazines, etc. Open daily 9a-11p.

**Comic Relief** : 2026 Shattuck Ave. (510) 843-5002. Comic books, cartoon books, etc. Open M, Tu 11a-8p, W-Sat 11a-10p, Sun 12p-8p.

**Dark Carnival** : 3086 Claremont Ave & The Uplands. (510) 654-7323. Materials "on the cutting edge" of imaginative fiction. Open M-Sat 10:30a-7p, Sun. 12p-6p.

**Friends of the Berkeley Library Bookstore** : 2433 Channing Way & Telegraph Ave (under Channing and Durant Parking Garage). (510) 841-5604. Used books on a plethora of subjects. Great prices! Open Tu-Sat 10a-4p.

**Shakespeare & Co.** : 2499 Telegraph Ave. (510) 841-8916. General used and discounted books. Open F-Sat 10a-9p, Sun 11a-8p.

## Invited Speakers

LYLE CAMPBELL

*University of Utah*

### **Language Isolates and Their History, or, What's Weird, Anyway?**

*Sunday (Day 2), 10:45 am*

Most linguists do not know how many language isolates there are in the world — there are many more than most are aware of. In this talk I address the questions:

1. How many language isolates are there?
2. What can we do to advance knowledge of the history of language isolates?
3. What methodological lessons does the historical study of specific isolates offer for understanding the history of language isolates in general?
4. What are the prospects for finding relatives for some language isolates, for showing that they belong to larger genetic groupings than those known at present?

I present evidence that language isolates, surprisingly, make up 1/3 of the independent genetic units (language families and isolates) of the world, and are therefore not as unusual as they are often thought to be. The isolates are listed. I argue that in principle language isolates are not very different from language families in several ways considered in the talk. In this context, for example, possible further clarification of the relationship between Basque and Aquitanian is offered. Isolates are distinguished from “unclassified” languages. Means for investigating the history of language isolates are discussed, including several examples. Prospects for possibly discovering genetic relationships for some isolates are considered, together with a list of some which have recently been demonstrated to be related to other languages or families of languages.

PETER T. DANIELS

*Co-Editor of The World's Writing Systems*

**Writing in the World and Linguistics**

*Saturday (Day 1), 2:30 pm*

The study of writing seems to be at about the stage the study of language was before the development of linguistics over the past century-and-a-bit. Everyone we know knows how to write, and therefore everyone we know thinks they know about writing. I will look at how writing has been presented to the general public and how it has been treated in linguistics since the first real textbook of 1933.

I then turn to how writing has been studied by specialists - beginning considerably earlier than modern linguistics - noting the transition from antiquarianism to serious investigation, and then the very gradual incorporation of the study of writing into mainstream linguistics: through tentative articles by general linguists, to a change in attitude in textbooks, to a sudden spate of books on writing by linguists (few if any of whom can be considered specialists).

Finally, I deal with some problems in the treatment of writing by general linguists who all too readily try to apply models of language to questions of writing without taking note of the fundamental distinction between language and writing. These problems include the adaptation of terminology from one field to the other without considering the implications, the assumption that writing change must be just like, or totally unlike, language change, and questions of the relation of writing to language.

JEAN-MARIE HOMBERT

*Dynamique du Langage, Centre National de la Recherche Scientifique (CNRS) & Université de Lyon 2*

**Language Isolates and Linguistic Diversity: A Case for a Mosaic Approach to Language Emergence**

*Saturday (Day 1), 6:30 pm*

Language isolates are languages which cannot be connected to other languages in the linguistic classification of the world's languages. They represent approximately 1% of the total number of languages with a very biased geographical distribution: close to one half of them in South America and a quarter of them in New Guinea. The absence of language isolates in a large number of geographical areas can probably be explained by the influence of languages with large population densities which historically replaced a much more diverse linguistic situation. The progressive domestication of food production (agriculture and animal domestication) played a major role in increasing population densities and consequently ethnic groups who mastered Neolithic technology imposed their language, thus erasing earlier linguistic diversity.

In linguistic research the study of language isolates is determinant for the understanding of language classification, language typology and human migrations. A proper classification of the languages of the world must take into account language isolates as well as larger and well established language families in order to ascertain an accurate picture of language diversity at the family level. For instance, the traditional four-family classification of African languages is re-evaluated to twenty families if isolates are taken into account. In a similar fashion and to insure a representative sample of the world's languages, large scale typological studies must include language isolates. Finally, the location of language isolates can be an extremely important clue to migration patterns.

The determination of language isolates is subject to our ability to evaluate that a given language is not linked to other languages. The traditional way of establishing linguistic links between languages is the comparative method. Unfortunately, this method cannot be applied for time periods older than 6000 to 8000 BP. Consequently, the current list of approximately fifty language isolates only shows that these languages cannot be related to other languages at that time period. Possible ways of pushing back this time limit have been proposed recently: the use of more resistant lexical items; consideration of more resistant linguistic structures. However, an important scientific question remains to be answered: Are "real" language isolates a trace of independent sources of language emergence? In other words, would these languages be evidence for a polygenesis (vs. monogenesis) origin of human language?

We will propose a scenario close to polygenesis, called a "Mosaic" approach in which we will suggest that the linguistic structures attested in contemporary languages are the result of the progressive integration in space and time of various aspects of linguistic complexity. Finally, this approach will be discussed in light of a recent debate on the relative role of linguistic diversity versus linguistic universals.

JOHN MCCARTHY

*University of Massachusetts, Amherst*

**Harmonic Serialism in Optimality Theory**

*Sunday (Day 2), 3:00 pm*

Harmonic Serialism (HS) is a version of Optimality Theory that incorporates serial derivations. It was mentioned only in passing by Prince and Smolensky (1993/2004), but lately it has been revived with some interesting results. The candidate-generating component Gen is the main locus of difference between “classic” OT and HS. In classic OT, Gen can produce candidates that differ from the input in multiple ways: e.g.,  $\text{Gen}(/pat/) = \{\text{pat}, \text{pati}, \text{pad}, \text{padi}, \text{peti}, \emptyset\}$ . HS’s candidates are allowed only one difference from the input at a time:  $\text{Gen}(/pat/) = \text{pat}, \text{pati}, \text{pad}, \emptyset$ . In HS, the Eval component selects the optimal member of this limited candidate set, which then becomes the input to another pass through Gen and Eval. This process continues until convergence: the input to Gen and the output of Eval are identical. In HS, then, the mapping from underlying to surface is gradual rather than immediate.

The arguments for HS are of two principal types: Classic OT has just two levels of representation, underlying and surface, but HS has intermediate representations as well. Without intermediate representations, some phenomena cannot be analyzed satisfactorily. For instance, syncope of unstressed vowels requires a level of representation where stress has been assigned but syncope has not yet occurred. Given identical constraints, classic OT and HS often make different predictions about what is a possible language. The reason is that HS’s intermediate forms have to be optimal. If there is no path from underlying /A/ to surface [B] through successive optima, then this mapping will be impossible in HS even if it is possible in classic OT. For example, certain unwanted predictions about stress in classic OT disappear when the analysis is implemented in HS instead. The second argument also indicates what would constitute evidence against HS and in favor of classic OT: an attested mapping from /A/ to [B] but no path through successive optima. No good cases of this type have yet emerged.

RICHARD SPROAT

*Oregon Health & Science University & Google Labs*

**Some Common Misconceptions about Writing Systems and Symbol Systems**

*Saturday (Day 1), 10:45 am*

In this talk I will discuss some common and persistent misconceptions about writing systems and symbol systems.

The first misconception is that non-trivial symbol systems that seem to exhibit structure in their “messages” must be (linguistic) writing systems, since structure is a property of language. This misconception is at the core of recent claims that the Indus Valley symbols must have been writing: The system clearly shows what appears to be syntactic structure, so it surely must represent language. I show that some obviously non-linguistic symbol systems also show quite rich structure. Hence the demonstration of structure in a system tells us absolutely nothing about its function.

The second misconception is that syllabaries are somehow more “natural” than segmental writing systems, because they directly encode syllables, which are themselves more intuitive phonological units than segments. The implication is that syllabaries require little abstraction on the part of users, something that I argue ignores how syllabaries typically work in practice.

The third misconception is that Chinese writing is logographic. If this claim is to be taken at face value, it means that Chinese writing represents an arbitrary mapping between symbols and words (or morphemes). This is surely true of part of the system. But as DeFrancis and others have argued, it misses the point that a major portion of the Chinese writing system is based on phonology. Nor is this a mere taxonomic quibble: the phonological component of Chinese writing can be shown to have “psychological reality.”

Finally, there is a common belief that if one wants to increase literacy in a society, it helps to make the writing system simpler. Commonly cited examples are Korean Hangul and Chinese character simplification. I will argue there is no basis for this belief. Indeed it is rather simple to show that while literacy rates correlate well with a number of socio-economic factors, the correlation between literacy rates and the complexity of the writing system is effectively zero.



## Papers

NOTE: *Paper presentations listed as “cancelled” in the schedule will still be published with the proceedings and while their titles are listed here, their short abstracts are not included.*

BRIAN AGBAYANI, CHRIS GOLSTON, & DASHA HENDERER

*California State University, Fresno*

### **Movement of prosodic constituents**

Languages group words and phrases syntactically as well as prosodically, and the two types of grouping do not always coincide (Selkirk 1984, 1986, 1995). We look at *hyperbaton* in Classical Greek (Devine & Stephens 2000) and Latin (Devine & Stephens 2006) prose, and in two Russian natural speech corpora, and show that it involves movement of phonological words and phrases rather than movement of syntactic constituents. The movement is sensitive to a phrasal instantiation of the Obligatory Contour Principle (Leben 1973) and insensitive to a wide range of syntactic constraints including the Coordinate Structure Constraint, Left Branch Condition, Adjunct Condition, proper binding of reflexives and reciprocals, and conditions on Anti-Locality. Hyperbaton is syntactically cross-categorical (Devine & Stephens 2000, 2006) and not limited by any known constraints on syntactic movement. Syntactic analyses of hyperbaton in Greek (Devine & Stephens 2000), Latin (Devine & Stephens 2006), and Russian (Gouskova 2000; Pereltsvaig 2008; Sekerina 1997) are not consistent with such facts, even when they admit of limited PF adjustments. There are robust restrictions on phonological movement in these languages, but they are prosodic in nature: hyperbaton is blocked if it brings together adjacent homophones within a prosodic word in all three languages. This makes sense if hyperbaton involves movement in the phonology, but not if it involves movement in the syntax, which is arguably phonology-free (Zwicky & Pullum 1986ab).

XABIER ARTIAGOITIA

*University of the Basque Country*

### **Basque genitive case and multiple checking**

I propose that Basque genitive structural case is checked in the functional projection *possessive* above QP and that this functional projection allows both subject *and* object to check case simultaneously in a multiple specifier configuration. The latter bears on the *Person Case Constraint* (Bonet 1991); Basque favors Jeong’s (2004: 419) formulation of the constraint (“two DPs cannot be [+person]/[+animate] if they check that feature against the same functional head”, reduceable to a local syntactic intervention effect (Rezac 2008): the head *possessive* in Basque acts as a probe for both subject and object goals, but the relationship of *possessive*-object in terms of person-Agree is blocked by a closer [+person] subject.

The arguments for the multiple specifier structure are two: (a) the derivation accords well with Richards’ theory of multiple specifiers (superiority is respected even when a possessor argument is added, quantifiers in S & O preserve their base scope properties); (b) the existence of PCC effects: both first and second person genitive arguments are possible targets of raising, but any combination of first *and* second person is ungrammatical.

Three conclusions can be drawn from this work: (a) UG allows multiple case (here, genitive) checking but not multiple person-checking; (b) given the lack of content of the head *Poss*, the present work gives additional support to syntactic approaches to PCC phenomena; and (c) it also suggests that structural genitive case is generalized in some languages: all DPs can, and must, raise to [spec, Poss].

MAX BANE

*University of Chicago*

**A combinatoric model of variation in the English dative alternation**

This paper reports on a novel method of modeling a significant portion of English speakers' nondeterministic variability in arranging the arguments of a certain class of dative, ditransitive verbs. Its general thesis is that the gradience of this variable phenomenon can be derived to a significant (though not total) extent from an otherwise categorical competence grammar by supposing that said grammar is *incomplete* or *underspecified* in some respect (as in Anttila 1997 et seq. and Adger 2006), and that observed asymmetries in the gradient data correspond directly to similar asymmetries in the combinatorics of how this underspecification can be resolved.

AMY CAMPBELL

*University of California, Berkeley*

**A typology of discontinuous exponence**

Discontinuous exponence (DE), which I take to be the realization of the features of a single syntactic node by distinct morphemes, has long been acknowledged as a problem for morphological theories that assume a one-to-one mapping between elements of form and meaning at the sub-word level. In addition, researchers in recent years have adduced examples of DE to investigate crosslinguistic tendencies in affix order and the internal structure of agreement feature sets. These studies are based on Trommer's (2002) survey of discontinuous marking of subject person and number on the verb, but DE in its broader sense has not yet been addressed in a systematic way.

This paper surveys the phenomenon of DE in 48 languages, paying particular attention to the inflectional categories that participate and their correlation to the forms of feature realization (affix, root allomorphy, or auxiliary word). I show that it is possible and advantageous to decompose the phenomenon into a number of logical subtypes, each of which must be accounted for by any complete theory of inflection.

HUI-WEN CHENG & CATHERINE CALDWELL-HARRIS

*Boston University*

**Orthography shapes semantic and phonological activation in reading**

The observation that different orthographies encode semantics and phonology with different amounts of transparency has led to the Orthographic Depth Hypothesis (ODH): phonological information will be activated in proportion to its transparency in the writing system. There is unclear support for the ODH in Chinese, because priming studies led Perfetti and colleagues to claim that Chinese script produces the same pattern of phonological activation as does English orthography. The present study uses a novel task that avoids the methodological problems of priming studies: semantic substitution errors while reading out-loud. These errors (i.e., reading 'bed' if the word is 'cot') are a defining characteristic of deep dyslexia, but rarely occur in normal English reading. Mandarin speakers (N=79) read aloud humorous stories, general current affairs, and technical scientific reports. Semantic substitution errors occurred for all passage difficulty levels, and regardless of whether participants read simplified or traditional script, were college students or middle students, or were good or poor readers. Strikingly, compared to English speakers who read passages with the English translations, those reading Chinese made 20 times more substitution errors. We propose that Chinese orthography activates phonology so weakly that readers do not maintain a robust image of the target word in working memory, even when reading out-loud. Strongly activated semantics

may also override phonology, replacing the target word with a semantic associate. These findings offer novel support for the hypothesis that writing systems' semantic and phonological transparency influence reading.

JIDONG CHEN

*California State University, Fresno*

### **Putting and taking events in Mandarin Chinese**

Placement events – e.g., putting a book into a bag and taking it out – are common in every culture, but languages vary in the lexico-grammatical devices they use to express such events. For instance they differ in how the information about putting/taking is typically distributed across utterance constituents in encoding semantic components like Figure, Ground, Motion, Manner, and Path and in the semantic distinctions drawn by their placement verbs. This study investigates the organization of semantic components in the encoding of placement events in Mandarin Chinese, and explores the semantic extensions of the major placement predicates. It shows that that Figure and Ground (Source/Goal) are encoded as arguments or adjunct coverb phrases and that Path and Motion are frequently encoded with directional verb compounds, as in *fang4-xia4-lai2* 'put-descend-come' (put down). As a whole, the compound conveys the core event of the (re)location of the Figure, with each of the component verbs encoding only one semantic aspect of the event. The two generic placement verbs – *fang4* 'put' and *na2* 'take' – are associated with large extensional event categories, but many events that are typically described with *put* or *take* in English require a more specific manipulation verb in Mandarin. The choice of verb is based on a number of semantic features, including properties of the Figure and of the Ground, the instrument involved the relationship between the Figure and Ground, and the Manner of the manipulation. This study supports the refined typology of motion events proposed by Slobin (2004) that Mandarin belongs to "equipollently-framed languages," which express Path and Manner/Cause with equivalent grammatical forms.

IOANA CHITORAN & EGIDIO MARSICO

*Dartmouth College & Dynamique du Langage, CNRS, University of Lyon*

### **Vowel devoicing: An updated phonetic typology**

We are investigating vowel devoicing (VD) from a typological phonetic perspective. We focus on three specific points: i) the difference between final and non-final VD; ii) the interaction between the different factors forming the context of VD; and iii) the possibility of a continuum from voiced vowel to vowel loss through a stage of devoicing.

Our survey is based on the UPSID database of 451 languages and an additional database we compiled based on individual grammars of approximately 100 languages. We first organize our language list following the distinction between final vs. non-final VD, and secondly according to the different factors known to be relevant to VD: vowel height, presence/absence of stress/accent, consonantal and prosodic environment.

Our study suggests that final VD is principally due to hypo-articulation, while non-final VD is an assimilatory process. The most common phonetic explanation for non-final VD is the overlap of glottal gestures between C and V. Constricted high vowels are particularly vulnerable, with asymmetries between [i] and [u] observed in some languages. This pattern is not predicted by gestural overlap, and we propose that supra-laryngeal frication plays a role here.

We conclude that at least three different mechanisms underlie VD: insufficient transglottal pressure differential (final VD), glottal gesture overlap, and supra-laryngeal frication (non-final VD).

MARK DINGEMANSE

*Max Planck Institute for Psycholinguistics***How to do things with ideophones: Towards a social interactional approach**

Ideophones are marked words that vividly depict sensory events, like English *kerplow* or Siwu *muku-muku* ‘mouth movements of a toothless person eating’, *nyenene* ‘sensation of shivering’, and *wiriwiri* ‘small things dispersed in great numbers’. In this paper I develop a social interactional perspective on the use of ideophones, an area in which there is virtually no previous research. Drawing from a varied corpus spanning several hours of social interaction in Siwu, a Kwa language spoken in eastern Ghana, I show that ideophones occur across a wide range of discourse genres, many of them well beyond narrative contexts of use. Across these usage contexts, a core interactional function of ideophones seems to be the creation of heightened interlocutory involvement. During the production of material culture, collaborators also use ideophones as a ‘precision tool’ to calibrate their knowledge and understanding of the materials they are handling — a role that ideophones, with their highly specific, imagistic semantics, are especially fit to fulfil. Concluding, I reiterate the importance of corpora of everyday social interaction for advancing our understanding of the use of ideophones in the world’s languages. As a vivid and versatile communicative workhorse, ideophones are worthy of broader attention from pragmatic and conversation analytic perspectives.

YOUNG AH DO

*Massachusetts Institute of Technology***Satisfying output-output faithfulness with excessive morphology: Evidence from Korean acquisition**

This study documents two ways in which children’s use of inflected forms in Korean deviate from adult usage, and provides a unified account. In adult Korean, the form of the stem may change by inflectional suffixes. The alternations in (1) are phonologically predictable and productive, while the alternations in (2) are not.

	a. Root	b. Imperative ‘V’	c. Present- Declarative ‘is-Ving’	d. Conjunct ‘V and’	e. Aspectual ‘try Ving’
(1) Regular	<b>cap-</b> ‘to catch’	<b>cab-a</b>	<b>cam-nin-da</b>	<b>cap-k’o</b>	<b>cab-a-cu-n-da</b>
(2) Irregular	<b>top-/tow-</b> ‘to help’	<b>tow-a</b>	<b>tom-nin-da</b>	<b>top-k’o</b>	<b>tow-a-cu-n-da</b>

I report the results of a picture description task, showing that children mirror adult responses for regulars, but deviate in two different ways for irregulars: they may fail to apply the correct stem modifications (e.g., (2c) [**tom-nin-ta**] → \*[**tow-n-ta**]), or use additional aspectual marking that they typically omit for regular verb inflection (e.g., (2c) [**tom-nin-ta**] → (2e) [**tow-a-cu-n-da**]).

The claim is that both outputs are motivated to inflect forms using the same form of the stem found in the ‘base’ form. Assuming that –a suffixed form is the ‘base’ in Korean verbal inflectional paradigms (Albright and Kang 2009), for regular verbs, outputs (1c) [**cam-nin-da**], (1d) [**cap-k’o**] and (1e) [**cab-a-cu-n-da**] deviate from the base (1b) [**cab-a**] in minor respects that all can be derived by regular Korean phonology.

For irregular verbs, on the other hand, deviations of outputs (2c) [**tom-nin-da**] and (2d) [**top-k’o**] from the base (2b) [**tow-a**] are more serious violations of Base-Ident. As observed in the experiment, children either create an erroneous form that better satisfies Base-Ident (\*[**tow-go**]) or they use an alternative form inserting additional morpheme as (2e) [**tow-a-cu-n-da**] which also better satisfies Base-Ident.

ANDREW DOMBROWSKI

*University of Chicago*

**When is orthography not just orthography? The case of the Novgorod birchbark letters**

The medieval birchbark letters of Novgorod, first unearthed in 1957, have proved a valuable source for the study of the history of Russian. Among other reasons, the birchbark letters are of interest because they provide a thorough picture of a strikingly divergent dialect of Old Russian, a fact that has spurred numerous studies evaluating the ramifications of the Novgorod data for the history of Russian and for the spread of Slavic more broadly. In this paper, I examine a feature of the birchbark letters heretofore generally explained as “purely orthographic” – namely, the confusion of the Cyrillic letters *o* ~ [back jer] and *e* ~ [front jer] in all positions. I argue that this feature in fact reflects the underlying phonology of the Old Novgorod dialect, which illustrates the more general point that the correct resolution of orthographic problems in historical texts can require specialized work in the historical dialectology of the language in question.

TERESA ELMS

*California State University, Northridge*

**Gesture-to-speech mismatch in the construction of problem-solving insight**

Fifty years of research into problem-solving cognition have established that people do not solve problems on the basis of their deep structure, but rather on the basis of their surface form (Pretz et al 2003, Kirsh 2009). This finding motivates a new look at problem solving *as discourse* – focusing not on how understood problems are solved, but rather on how problem-solving discourse is understood. Discourse analysis shows promise in this area because people routinely display their cognitive states to each other in speech and bodily signs, fully expecting interlocutors to understand and respond to these displays (Heritage 2005). Moreover, visible actions such as gesture and gaze have been shown to be closely coupled to language production and meaning-making by both speakers and hearers (Schegloff 1984, Goldin-Meadow 2003, Kendon 2004, McNeill 2005, Streeck 2009).

The present report analyzes a case of problem-solving insight achieved by one participant in a collaborative problem-solving task. The task was a murder mystery based on a story by Raymond Chandler. The participant, “TOM”, appeared to use propositional speech and gestural simulation as checks on each other while hypothesizing alternative interpretations for the actions of a murder suspect. Each scenario began with a gestural metaphor for a named kinship relationship between suspect and murder victim. Cross-modal mismatch between speech and gesture led to repair. Irreparable cross-modal mismatch led to generation of a new kinship metaphor. Successful completion of a gestural simulation that was semantically congruent with utterance did not merely precede, but actually constructed, problem-solving insight.

CALEB EVERETT

*University of Miami*

**Semantically-oriented vowel reduction in an Amazonian language**

A handful of English-based phonetic studies have demonstrated that speakers frequently reduce vowels when they occur in words that are highly predictable semantically. The vowels in question are reduced in terms of duration and/or position within the F1-F2 plane. The present study demonstrates that the phenomenon is cross-linguistic by providing clear evidence for its existence in Karitiâna, a Tupí language spoken in southwest Amazonia. The author recorded eight female Karitiâna speakers, via Praat, onto a Mac G4 laptop at a sampling rate of 44.1 kHz. The speakers were recorded producing clauses in which the final word was either semantically predictable or unpredictable. For each of five vowels, namely /i/, /i/, /e/, /a/,

and/ o/, six clauses per speaker ( $8 \times 5 \times 6 = 240$  total clauses) were produced in which the vowel being analyzed occurred in the final word. In half the clauses, the final word was semantically predictable from clausal context, in the other half the same word was semantically unpredictable. Semantic predictability correlated with temporal reduction for each vowel type. Spectral reduction also occurred, and this reduction was significant according to an ANOVA based on F1 values, as well as an ANOVA based on F2 values. The findings contribute to our understanding of variability in vowel production and demonstrate that the semantically-oriented reduction of vowels is a cross-linguistic phenomenon, occurring in the speech of an Amazonian tribe much as it does in the speech of Americans.

JOHNNY GEORGE

*University of California, Berkeley, and Nagoya University of Commerce and Business*

**Universals in the visual-kinesthetic modality: Politeness marking features in Japanese Sign Language (JSL)**

This work describes a study (modeled on Hill et al 1986) that teases out politeness marking features in JSL. The investigation uncovers a number of prosodic features relevant to marking politeness in JSL and demonstrates that non-signers and signers share a visual-kinesthetic communication medium that enables non-signers to occasionally interpret signs derived from assimilated gestures recognized either culturally in Japan or universally by users of different languages.

The findings show that a number of prosodic features mark politeness in JSL including facial expression, size of signing space, head position and rate of signing. Non-signers shared similar intuitions as signers about the politeness levels of more than half the expressions. Cues related to the shared visual-kinesthetic medium used by Japanese signers and non-signers facilitated the non-signers' ability to rate politeness levels in a way consistent with the intuitions of JSL signers.

Prosody occupies a central role in marking politeness, and any examination of politeness requires a thorough investigation of prosodic as well as lexical features. JSL relies on a number of non-manual signal features, similar to prosodic features in spoken language, to express politeness register. Signers and non-signers have shared communicative practices emerging from their shared social context. While it has been understood that signers have access to non-signer communicative practice from the oral-aural modality, non-signers' ability to access information from the sign modality due to shared visual-kinesthetic communicative practice has not received as much consideration.

YOUSSEF A. HADDAD

*University of Florida in Gainesville*

**Expletive control in Telugu**

Telugu is a Dravidian language of the Indian Subcontinent. Like other South Asian languages, Telugu licenses Obligatory Adjunct Control into adverbial clauses known as conjunctive participle clauses. Adjunct Control constructions are structures in which the subject of the matrix clause and the subject of the adverbial clause are obligatorily coreferential; e.g.,  $\Delta_{i/*k}$  *having had a fever, Kumari took medicine*. At the same time, Telugu licenses constructions that violate the Adjunct Control requirement. These are structures in which the subject of the matrix clause and the subject of the adverbial clause are disjoint; e.g., *The rain having fallen, the river flooded*. Similar violations are attested in other South Asian languages as well, and they have received very few, mainly semantic, analyses in the literature. This paper offers a syntactic analysis. It shows that these violations to Adjunct Control are non-violations and that they are instances of Expletive Control that involve two unaccusative predicates. The proposal is challenged by the absence of similar Expletive Control structures in English. The paper lays out the English data and shows that they do not present a challenge to the Telugu data.

NANCY HEDBERG & DAVID POTTER

*Simon Fraser University*

### **Equative and predicational copulas in Thai**

A controversy has arisen as to whether languages exhibit a distinctive equative copular base used in specificational sentences (an “equative” analysis), or whether specificational and predicational copular sentences derive from the same base (an “inverse” analysis). We present evidence from Thai that supports an equative analysis.

Thai exhibits two lexical copulas and thus presents an opportunity to test the predictions of these analyses. The equative approach posits that irreversible predicational copular sentences are derived from a base that is distinct from that of the generally reversible equative and specificational copular sentences. It thus predicts that specificational and identity sentences would be expressed with one copula, while predicational sentences would use the other. The alternative approach generally derives specificational sentences in a variety of languages via inversion from a predicational small clause base, with some authors also positing an equative analysis for identity sentences. This analysis predicts predicational and specificational sentences to be expressed with one copula.

Using an acceptability judgment task, we found that the judgments of native Thai participants supported our hypotheses, but by small margins. We suspected these small differences the result of semantic type shifting and consequently conducted informant interviews utilizing contextualizing scenarios to control type shifting, which yielded judgments that further support our hypotheses.

We conclude that Thai confirms the predictions of the equative approach: one copula (*bpen*) is used in predicational sentences ( $e + \langle e, t \rangle$ ), while the second copula (*kheuu*) is used in specificational sentences ( $\langle \langle e, t \rangle, t \rangle + e$ ) and in identity sentences ( $e + e$ ).

KATARZYNA JANIC

*Dynamique du Langage, CNRS, University of Lyon*

### **On the reflexive – antipassive polysemy: Typological convergence from unrelated languages**

The antipassive, which raised considerable interest in syntactic descriptions of ergative languages (Dixon 1994), is defined as a derived construction with a two-place predicate the patient of which is either suppressed or realized as an oblique (Polinsky 2005). To derive antipassives, many ergative languages, in particular the Australian ones use an antipassive marker diachronically associated with the reflexive/middle function. A typological investigation in the development of reflexive markers shows that the same polysemy exists in accusative languages, particularly in Slavonic languages. The fact that the same polysemy is observed in genetically unrelated languages provides clear evidence that the morphological coincidence is by no means homophonous.

This paper argues in favour of the recognition of antipassives in accusative languages, in particular in Slavonic languages. It aims at showing that the shared morphology of reflexives and antipassives is historically grounded. It compares also the semantic and/or pragmatic functions of the constructions in question to suggest that antipassives developed diachronically from reflexives through functional extension.

Following Terill (1997) for Australian languages, I propose that the development of antipassive function from reflexive morphology in Slavonic languages was triggered pragmatically. The features associated with the reflexive domain were extended to code a similar pragmatic situation but in which the core arguments are not coreferent. Unlike Australian languages in which the evolution was a three-step process, the diachronic change in Slavonic languages was only a two-step process: reflexive > pragmatic antipassive resulting in ambiguous patterns.

SVERRE STAUSLAND JOHNSEN

*Harvard University***Neighborhood density in phonological alternations**

In Norwegian, an initial /s-/ may undergo optional retroflexion to /S-/ if preceded by /r/. This happens more often when /s-/ is followed by a consonant than when it is followed by a vowel. I investigate the role of neighborhood density as a predictor for this asymmetry, assuming that words with many neighbors are less likely to undergo retroflexion. Although neighborhood density is a good predictor by itself, the analysis shows that a phonological factor referring directly to the complexity of the onset fares much better as a predictor of retroflexion. I propose that neighborhood density is the diachronic trigger of the asymmetry, and that it has been generalized in the phonological component of the grammar.

HIJO KANG

*SUNY Stony Brook***Position and height asymmetries in hiatus resolution: A case study of Korean VV sequences**

When a hiatus is resolved by the elision or the gliding of one of the two vowels, two asymmetries are known to exist;  $V_1$  (POSITION asymmetry: Casali 1996, 1997) and high vowels (HEIGHT asymmetry: Rosenthal 1997) are more likely to be the target of weakening than  $V_2$  and non-high vowels respectively. Following Ohala's (1993) argument that typological patterns are caused by human articulatory and/or auditory mechanisms, this study tests the hypothesis that the durational variations in adjacent vowels, arising from speech rate manipulation, would be similar to those that arise in hiatus diachronically. Thirty nonce words including VV sequences and 9 control words with CVCV structure were recorded by six Korean speakers, three times as slow and fast speech rates. The  $SS_1$  (the Steady State of  $V_1$ ), TP (Transitional Period), and  $SS_2$  (the Steady State of  $V_2$ ) of the vowel sequences were analyzed. The results showed that  $SS_1$  was significantly shorter than  $SS_2$  irrespective of speech rate ( $F(1,5)=12.90$ ,  $p < 0.02$ ), which was not found in control words ( $F(1,5)=0.55$ ,  $p = 0.49$ ). It was also found that high vowels were proportionally shortened more than non-high vowels in fast speech ( $F(1,5)=7.16$ ,  $p < 0.05$ ). The results partially support Ohala's view. The two asymmetries in hiatus resolution do seem to reflect the variation in ordinary speech. The weakening of  $V_1$  can result from the fact that  $V_1$  is relatively short and the weakening of high vowels can be due to the reduction of high vowels in fast speech.

HRAYR KHANJIAN

*Massachusetts Institute of Technology***Negative concord in Western Armenian**

This paper identifies a typologically unique pattern of negative concord (NC), found in Western Armenian (WA). In WA, negative strings or n-words such as *vochmegpan* "nothing" and the negative verbal prefix *chi-*, are each independently optional. As long as at least one of them appears (as in (1a-c)), the sentence has a negative meaning. Crucially, as is typical for NC languages, multiple negative strings (as in (1a) and (2)) only contribute a single negation to the semantics.

- (1) a. *voch-meg-pan chi-gera*  
       no-one-thing NEG-ate  
       "I ate nothing."  
       b. *pan-məchi-gera*  
       c. *voch-meg-pan gera*



- (2) *voch-megə voch-meg-un voch-meg-pan chi-dəvav*  
no-one no-one-DAT no-one-thing NEG-gave  
“No one gave anything to anyone.”

From these cases, following Zeijlstra’s (2004) analysis of NC, I argue that the *n*-words and the negative marker in WA carry [uNEG] features and are checked off by a [iNEG] bearing covert negative operator. Such a language is actually a logical consequence of Zeijlstra’s (2004) analysis where there is no functional need for sentential negation and therefore omissible. However given two verbal negations, (3), a double negation reading arises, suggesting that the negative markers actually bear [iNEG] features.

- (3) *ch-bidi ch-udem*  
NEG-will NEG-eat.1S  
“I will not not eat” = “I will eat”

In this talk I explore possible analyses of negative concord and double negation facts in WA following the syntactic agreement approach of Zeijlstra (2004).

HYUN-JU KIM  
*SUNY Stony Brook*

### **Emergent hidden grammar: Stochastic patterning in Korean accentuation of novel words**

The lexical accent pattern of a word in North Kyungsang Korean (NKK) is lexically determined as illustrated in the following minimal triple *káci* ‘kind’, *káci* ‘eggplant’, *káci* ‘branch’ (Y. Chung 1991; N. Kim 1997). How do NKK speakers decide to accent newly adopted words, which lack accent specification in UR? I present empirical evidence that the accent patterns in novel words are sensitive to syllable structure and they do not originate from analogy to phonetically similar familiar words (e.g. Albright and Hayes 2001): frequency of actual double accents (HH, HHL) and final accents (LH, LLH) was significantly higher than that of the analogy patterns in words of which the initial two syllables were closed, and of which the final syllable was closed respectively ( $p < .001$ ). Furthermore, a corpus study of the lexical frequency shows that the regular patterns generally agree with the statistical patterning in the corpus. I conclude that the regular patterns disclosed in the novel words are present in the lexicon although they are obscured by exceptions. I argue that NKK speakers internalize lexical statistical patterning and construct a stochastic grammar based on lexical frequency (Zuraw 2000; Hayes & Londe 2006) that guides the accentuation of novel words in NKK. This study provides an account of the sources of the emergence of syllable-sensitive accentuation patterns in loanwords.

IKSOO KWON  
*University of California, Berkeley*

### **Evidentiality in Korean counterfactual conditional constructions**

The aim of this paper is to shed light on the fact that a firsthand evidential marker *-te-* can be employed in Korean counterfactual conditional constructions. The phenomenon is of special interest, since it has been claimed that “[e]videntials are normally used in assertions (realis clauses), not in irrealis clauses, nor in presuppositions” (Anderson 1986: 274-275). Nevertheless, this paper shows that the firsthand evidential marker does appear in Korean counterfactual conditional constructions.

Based on a number of reasons, this paper argues that the use of a retrospective firsthand evidential marker in the protasis is, in fact, an optimal distancing strategy that conceptually licenses counterfactual

conditional constructions in Korean (contra Anderson (1986)). First, it is the perfective marker *-ess-*, not the evidential marker *-te-*, that encodes the perfectivity of the described event in the constructions and thus, the realis characteristic of the marker does not directly affect the counterfactual conditionals. Second, since the evidential marker's space presuppositional characteristic and distancing functions (Kwon 2009) will enable the constructions to convey deeper counterfactuality than those without the marker, even implicating the speaker's regret on the past event. Within the Mental Spaces Theory framework (Fauconnier 1997; Dancygier and Sweetser 2005), this paper explores and discusses these seemingly non-canonical phenomena in an elegant and consistent fashion by modeling of how the evidential marker's distancing function conceptually fits in Korean counterfactual conditionals.

WOJCIECH LEWANDOWSKI

*Universitat Autònoma de Barcelona*

### **The source-goal asymmetry in SLA**

Speakers of different languages express goals in preference to sources. It has been claimed that this asymmetry has its origins in non-linguistic event representations (Lakusta and Landau 2005). We provide evidence that the goal bias has important implications for SLA. In particular, we address the acquisition of *come* and *go* (C&G) by Polish speakers of Spanish L2. As first shown by Fillmore (1971), C is a goal-oriented, while G is a source-oriented verb (cf. *John came home at 5* vs. *John went home at 5*). The lexical semantics of C&G differs across languages. E.g. in Spanish C expresses motion toward the speaker, whereas G describes motion away from the speaker. By contrast, in Polish the use of C&G relies on non-deictic factors: C is preferred when the speaker adopts an arrival-oriented perspective and G if the motion event is conceptualized from a source-oriented perspective, regardless of the goal of movement. We hypothesized that the acquisition of C&G by Polish speakers of Spanish L2 is constrained by the goal bias in spatial cognition, i.e. that the shift from the source-oriented perspective to the goal-oriented perspective will be easier than the other way around. An acceptability judgment task performed with 30 Polish learners of Spanish L2 of different proficiency levels and a control group of 10 Spanish native speakers confirmed our hypothesis.

CAITLIN LIGHT

*University of Pennsylvania*

### **Subject relatives and expletives in Early New High German**

This paper argues that the adverb *da* ("there") was available as a subject expletive in Early New High German. This is primarily visible in clauses from which the logical subject has been extracted. Our data is drawn from a fully parsed corpus consisting of 40,000 words taken from Martin Luther's *Septembertestament*, published in 1522. The element *da* occurs in 19% of all clauses with a subject gap (out of a sample of 401), and in each case it is clause-initial. This phenomenon does not occur in clauses without a subject gap. We will argue that the subject may optionally be extracted from its base position, leaving Spec,TP empty. An expletive is then licensed to satisfy the EPP. Further evidence will be found in the Old High German text *Tatian*; 20 out of a sample of 41 subject relative clauses have *thār* ("there"), and it is always clause-initial. We will show that *da* is not possible as an expletive in contemporary German (contra Bayer & Suchsland 1997, Richards & Biberauer 2005). These three periods track the loss of an overt subject expletive in German.

- (1) Jhesus, der **da** heyst Christus  
 Jesus who DA is-called Christ  
 "Jesus, who is called Christ." (*Septembertestament*, Matthes 1:16)

- (2) theru, thiū thār ginemnit ist unberenta  
that-one that THAR named is unbearing  
“She who is called barren” (*Tatian*, Lucas 1:36)

JOSITA MAOUENE, NITYA SETHURAMAN, MOUNIR MAOUENE, & LINDA B. SMITH  
*Grand Valley State University, University of Michigan Dearborn, Université Abdelmalek Essaadi (Tangier, Morocco), & Indiana University*

### **An embodied account of argument structure development**

We suggest a new way to examine links between action, the body parts that do those actions, and the argument structures associated with the verbs that label those actions. In complement to the growing literature suggesting that verb meaning and argument structure develops out of correlations in linguistic experience, we suggest that *correlations with body experiences* may also contribute to children’s developing knowledge. We present 4 studies: 2 association studies (verbs and body parts association in both adults and 3- to 5-year-olds; verbs and object associations in adults, and sorted relationship between each verb and its most frequently named object into one of five grammatical categories), a corpus analysis of verb and first object co-occurrences (CHILDES) and a correlation study between non sense sentences and body regions (adults, 4-and 5-year-olds). Our studies suggest that children have a systematic awareness of associations between early-learned verbs and body parts. We argue that this knowledge may help them in learning correlations between verbs and argument structures. Children differ from adults in that the associations they have made tend to be more concrete and more body-centered, which may be part of the explanation for their learning HAND and LEG verbs earlier than verbs associated with HEAD. This greater emphasis on HAND verbs may be part of the explanation for their learning manipulative and transitive constructions (e.g., *cut the \_\_\_\_* and *pick the \_\_\_\_*) earlier. As children learn more HEAD verbs, they use more mental constructions (e.g., *think that \_\_\_\_*).

GRANT L. MCGUIRE  
*University of California, Santa Cruz*

### **Orthographic effects on attention to phonetic cues**

This paper presents experimental data that attempts to tie together two different phenomena. First, there is strong evidence that phonemic awareness is strongly influenced by one’s writing system such that learning an alphabetic writing system focuses attention on the segment as a unit separate from other larger units, such as syllables. This phenomena may be related to the Developmental Weight Shift hypothesis (Nitttrouer, 1996; 2002) where English learning children switch from relying on dynamic formant transitions to static frication noise in sibilant identification. This could be accounted for as a shift to phonemic processing brought on by learning to read and write English. This paper presents data from four experiments with adult native-speakers of English demonstrating that attention to sibilant cues can be directed orthographically when that contrast is non-native and one-dimensional. Such an effect was not found for native cues and multidimensional contrasts, suggesting that native cue weighting effects are too strong to be overcome by orthographic differences and that cognitive load effects mediate the phenomena.

LEV MICHAEL

*University of California, Berkeley*

**The Pre-Columbian origin of a ‘diachronic orphan’: The case of Omagua**

This talk examines the origin of Omagua, which with its sister language Cocama, were thought to be members of the Tupí-Guaraní (TG) family (e.g. Campbell 1997). Cabral (1996), however, showed that Cocama exhibits such a radical restructuring of the TG grammatical profile that it cannot be considered a TG language, and proposed that Cocama is a TG-lexified abrupt creole that arose in the Jesuit mission settlements in northern Peru during the late 17th century.

This talk draws on analyses of an Omagua corpus to argue that while Omagua has a non-genetic relationship to the TG languages, a close examination of surviving Jesuit and Franciscan records leaves little doubt that Omagua and Cocama already existed in their restructured form with respect to TG languages at the time of Europeans’ arrival in the Amazon Basin. A comparison of Omagua and TG languages shows more points of grammatical continuity than is typical of abrupt creoles, and that the similarities are characteristic of ‘simplified languages’ and conventionalized foreigner talk varieties like Central Motu (Dutton 1985) and Broken Oghibbeway (Nichols 1995). These facts suggest that Omagua arose gradually from a simplified form of a TG language (probably a regional trade language) in the Pre-Columbian era.

CHRISTOPHER MILLER

**Transfer and contact phenomena in the genesis of the Philippine-Indonesian Baybayic scripts**

Indigenous scripts of Sumatra, Sulawesi and the Philippines are argued to have developed from Gujarati script introduced during the 14th to 16th centuries, based on systematic formal correspondences between Gujarati script and Philippine letterforms from a 1593 document and early 17th century handwriting. A reconstructed proto-script demonstrates the similar origins of related scripts in Sumatra, accounts for previously opaque relationships between the characters in different scripts, and provides evidence for distinguishing older and more recent variants in each script. Analysis of early Philippine variants provides evidence for the earliest letterforms from which known attestations of Sulawesi script (from which the Philippine script was borrowed) developed through regular processes. The Old Makassar script of southwest Sulawesi is shown to derive directly from a version of South Sumatran script, with several letters borrowed from a ca 17th century version of Javanese script.

Changes in letterforms are shown to result from regular changes in stroke structure and rotations or reflections of characters, while borrowings from contemporaneous Javanese or Old Sumatran scripts or from alternative Gujarati letters are shown to be motivated by a need to maintain distinctions between characters whose form converges as a result of such changes. It is argued that several character changes led to partial convergence in form with the pre-existing Old Sumatran script, motivating the near total replacement of Gujarati vowel markers by the Old Sumatran vowel marking system.

SATOSHI NAMBU

*University of Pennsylvania*

**A quantitative analysis of the nominative/genitive alternation in Japanese**

The Japanese nominative case particle *ga* can alternate with the genitive *no* in some embedded clauses (Nominative/Genitive Alternation, hereafter NGA). In this study, I conducted a quantitative analysis of NGA using the Corpus of Spontaneous Japanese (CSJ) and the Minutes of the Japanese Diet (MJD), and elucidated language-internal and -external factors, focusing on its change in progress. I extracted 4,945 tokens of the variables *ga* and *no* from CSJ and 7,600 tokens from MJD. To exclude the interaction effects

by the factors, I adopted a logistic regression analysis, considering the nominative and genitive case markers in NGA as variables. As Harada (1971) hypothesized, the analysis showed that there actually exists a change from the genitive *no* to the nominative *ga*. The use of *no* decreases every year (the rate of change is .98 in MJD and .95 in CSJ). The followings are main factors of NGA from the logistic regression. (1) Adjacency In the adjacent environment, where a subject and its verb are next each other, the genitive appears more frequently than in the non-adjacent environment (the difference between the environments is 38.6 in Exp(B)), as Harada (1971) indicated. (2) Transitivity restrictions Following the restrictions, every subject that occurs with a direct object in the relevant clauses are nominative, which supports Watanabe (1996). (3) Stativity The more static the predicate is, the more frequently *no* appears (adjective>existential verb>adjectival verb>verb), contrary to Horie and Kang (2000).

DAVID POTTER

*Simon Fraser University*

### **A sister-precedence approach to the linearization of multiple dominance structures**

A current trend in syntactic theory explores of the use of multiple dominance structures for the analysis of right-node raising and across-the-board movement, and in the formal description of movement (e.g. de Vries (2009), Wilder (1999)). A dominant theme in this line of research has been the formal characterization of the relationship between multiple dominance structures and the precedence relations between their terminal nodes. We argue that recently proposed algorithms (e.g. Wilder (1999) and Gracanin-Yukse (To Appear)) are not empirically or theoretically satisfactory.

We propose an algorithm that correctly linearizes multiple dominance structures. We assume that successful linearization results in the linear ordering of the terminals of a structure, and that linearizability is a constraint on possible tree structures, following Kayne (1994). The structural relations necessary for the algorithm are defined in terms of dominance and sisterhood. We define two dominance relations: full dominance, following Wilder (2008) and a novel relation, parent dominance. We also assume a definition of c-command that reflects parent dominance.

Finally, we present two independent motivations for this algorithm. First, violations of the peripherality conditions, which require that a right-shared element be right peripheral and that a left-shared element be left peripheral in their conjuncts (Van Oirsouw (1987), Wilder (2008)), are excluded due to unlinearizability. Second, the Lebaux effects, which are problematic for multiple dominance theories of movement, can be again explained by Lebaux's (1991) analysis under the proposed definition of c-command.

HANNAH PRITCHETT & ALICE GABY

*University of California, Berkeley*

### **A dynamic typology of wanting in Australian languages**

This talk will explore how wants and desires are communicated in over forty Australian Aboriginal languages, with a view to developing a dynamic typology of desiderative constructions. Desires may be expressed in a variety of ways, the most common being a lexical desiderative verb, a dedicated desiderative marker, or through the use of purposive, future, potential, or irrealis morphology. Desires are also commonly communicated via clauses without any explicit mood marking, given the right context. We find regular patterns of polysemy common to both explicit and implicit expressions of wanting. Such networks of polysemy shed light on the diachronic sources and destinations of 'want' codings.

In presenting a classification of common trajectories in this domain, this talk will seek to explain both the introduction and loss of 'want' constructions as the result of a pragmatic tension. Expressing one's individual desires can be pragmatically risky, either because they are not shared by one's interlocutor or

because of their association with requests. There is, therefore, a conflict between the speaker's wish to successfully communicate their wants, on the one hand, and the wish to avoid putting these wants on the record (cf. Brown and Levinson 1987). We will argue that this tension produces a linguistic cycle (e.g. Jespersen 1922, Croft 1991; van Gelderen 2009). No sooner do the forces of conventionalization make formerly implicit expressions of desire explicit, than the drive to express one's wants off the record prompts the speaker to express their desire by alternative means.

TOM RECHT

*University of California, Berkeley*

### **Loanword-effected morphological restructuring in the Hebrew verb system**

I describe an ongoing fundamental restructuring of the Hebrew verbal morphology system, largely due to the influx of loan verbs. Hebrew speakers' desire to faithfully preserve the original forms of loan verbs, which are not formed from Semitic trilateral roots, results in at least three separate strategies of accommodation, all of which have the effect of moving Hebrew verb morphology away from a root-and-template system and towards a more typologically common stem-and-affix system. First, based on an existing native model for quadrilateral roots, the template slots for root consonants (C-slots) are being reinterpreted as slots for consonant clusters (C\*-slots). Second, elements of verb templates which happen to be identical with elements of a verbal lexeme are being enlisted into the verb form as a way of preserving the original form of the loan verb. Third, in a few colloquial loan verbs, the location of stress, normally determined by the verb template, is part of the lexical representation, again as a result of faithfulness to the original form of the loanword. The result of these strategies is that an increasing number of Hebrew verb forms must be analyzed as consisting of a stem plus affixes, rather than a root and a template. I argue that the incipient typological shift represented by these three developments should be ascribed to speakers' creative use of existing affordances in the verb system in order to maximize faithfulness to the source form of lexical borrowings.

SHARON MIRIAM ROSS & ILA NAGAR

*Ohio State University*

### **Jack and Jill: Early emergence of discrimination between male- and female-directed speech**

We report on work investigating the extent to which adults and children are aware of stylistic differentiation in linguistic forms directed to male addressees versus to female addressees. Working with 48 adults and 93 children between the ages of three and five, we employed an experimental design in which subjects were instructed to listen to a speaker and identify the addressee: a boy or a girl. Within subjects, linguistic stimuli varied along two dimensions—direct vs. indirect speech acts, and term of endearment use. Gender of speaker was controlled in a cross-subjects design. Not surprisingly, in the results from the term of address items we found a strong correlation between association of *buddy* with speech addressed to boys and *sweetheart* addressed to girls. Additionally and of greater interest, we found main effects of subject age, subject sex, and speaker sex as well as interactions between these factors and term of endearment used. We conclude first that by three years of age children have identified that linguistic forms can be employed as cues to identify addressee gender, a finding that had not yet been reported. We further conclude that a complex set of factors determine children's perceptions of which speech is directed toward which sex of addressee. We discuss the implications that our work has first for the study of early pragmatic development and children's emerging perception of register, and second for language and gender studies and how early socialization may lead to the emergence of gender-specific linguistic performance.

ANKELIEN SCHIPPERS

*Rijksuniversiteit Groningen*

**Partial wh-movement and wh-copying in Dutch: Evidence for an indirect dependency approach**

I report on a magnitude estimation experiment in Dutch investigating the relative acceptability of partial wh-movement and wh-copying versus standard long-distance (LD) movement in Dutch. The constructions are illustrated in (1)–(3), respectively.

- (1) [<sub>CP1</sub> Wat denk je [<sub>CP2</sub> wie het verhaal aan Jan heeft verteld? ] ]  
What think you who the story to Jan has told?  
'Who do you think has told the story to Jan?'
- (2) [<sub>CP1</sub> Wie denk je [<sub>CP2</sub> wie het verhaal aan Jan heeft verteld? ] ]  
Who think you who the story to Jan has told?  
'Who do you think has told the story to Jan?'
- (3) [<sub>CP1</sub> Wie denk je [<sub>CP2</sub> dat het verhaal aan Jan heeft verteld? ] ]  
Who think you that the story to Jan has told?  
'Who do you think has told the story to Jan?'

In line with claims that Dutch doesn't have partial wh-movement and wh-copying, the results showed that LD wh-movement was indeed rated most acceptable. Interestingly though, there was a significant difference in ratings between partial wh-movement and wh-copying: wh-copying was rated higher than partial wh-movement. I argue that these results speak in favor of the so-called indirect dependency approach to partial wh-movement, and discuss in some more detail what the exact syntactic analyses of the constructions under consideration should be. Finally, I also address the source of parametric variation in the availability and acceptability of these constructions.

NATHAN SCHNEIDER

*Carnegie Mellon University*

**Computational cognitive morphosemantics: Modeling morphological compositionality in Hebrew verbs with Embodied Construction Grammar**

This paper brings together the theoretical framework of Construction Grammar and studies of verbs in Modern Hebrew to furnish an analysis integrating the form and meaning components of morphological structure. In doing so, this work employs and extends Embodied Construction Grammar (ECG; Bergen & Chang, 2005), a computational formalism developed to study grammar from a cognitive linguistic perspective. The adaptation of ECG—until now a lexical/syntactic/semantic formalism—enables us to account for the compositionality of *morphological* constructions, elegantly accommodating idiosyncrasy while encoding generalizations at multiple levels. Similar to syntactic constituents, morphemes are composed to form words, with compositional behavior specified via form and meaning constraints. ECG *form schemas* can readily encode nonconcatenative behavior of root-and-pattern morphology in Semitic languages such as Hebrew. The semantic expressiveness of the formalism is demonstrated by adopting Mandelblit's (1997) analysis, in which Hebrew verb paradigms *prototypically* contrast with respect to causativity, voice, and other semantic attributes (but may also play host to non-prototypical verbs with idiosyncratic lexicalized meanings). For example, *ganav* 'steal' and *ginev* 'sneak' have regular forms, share the same root, and are semantically related—yet are not fully compositional because their meanings are not predictable strictly from the meanings of the root and of the respective paradigms. This formal, cognitive description should

pave the way for computational models of morphological learning and processing in Hebrew and other languages.

TYLER SCHNOEBELEN

*Stanford University*

**(Un)classifying Shabo: Phylogenetic methods and the Basque of Africa**

Shabo (SW Ethiopia) is one of our greatest classification puzzles. Only a handful of people have studied it, and while they tend to place it in Nilo-Saharan based on wordlists, the classifications are tentative and couched in caveats. The uncertainty leads Ehret (1995) to take Shabo out of Nilo-Saharan: there are just too many similarities to too many different languages, he says. To clarify the situation, I discuss new grammatical data based on fieldwork.

Wichmann and Holman (forthcoming) have used computational models to determine which features in the World Atlas of Languages are the most stable for predicting genetic relationships. Using these features, I compare Shabo to 250 languages of the region. Features like “presence of initial velar nasals”, “case syncretism”, and “word order” are supplemented by lexical comparisons of the core vocabulary. Together, these show which languages Shabo may have affinities with.

Beyond documenting a highly endangered language (there are perhaps 400 speakers of Shabo), this paper offers an innovative use of phylogenetic tools that biologists have developed. I demonstrate the potential power of such methods in building classifications and exploring the increasing amounts of typological data available to us. These tools can be used heuristically to develop hypotheses: could Shabo be related to Fur, Tama, or Ngiti? In this case, no convincing phylogenetic signal emerges. And the evidence makes a Nilo-Saharan hypothesis especially unlikely. Based on our current understanding, it is better to call Shabo an isolate — the Basque or Burushaski of Africa.

GUILLAUME SEGERER

*CNRS – LLACAN, France*

**Some hypotheses about possible isolates within the Atlantic branch of the Niger-Congo phylum**

About sixty languages, spoken on the westernmost coast of Africa, form together what is commonly known as the Atlantic branch of the Niger-Congo phylum. But their genetic relatedness is far from being demonstrated. Instead, some of these languages are possible isolates. Among the candidates, Bayot is of special interest: this language may be arguably both related to and divergent from the Joola cluster, to which it is traditionally associated. The hypothesis is that Bayot was once a distinct language, which has undergone considerable Joola influence through centuries of continuous contact. Furthermore, there is no convincing evidence today that proto-Bayot was even distantly related to Joola.

Other languages, namely Sua, Bijogo, Nalu, Limba, and the Cangin cluster, are lexically isolated. Their position is different from that of Bayot, insofar as, unlike Bayot, they seem to show no such influence from any neighbouring language.

To consider these as isolates may seem arbitrary but could help stimulate scholarly efforts to look for clearer evidence of genetic relationship within this problematic language group.



REIJIROU SHIBASAKI

*Okinawa International University*

**From relativization to nominalization and more: Evidence from the history of Okinawan**

This study addresses the historical development of the Okinawan nominalizer *si* out of its earlier use of the head of relative clauses. For this study, Okinawan historical materials from the sixteenth century to the present are examined that covers the whole history of Okinawan. The historical survey of the Okinawan nominalizer provides evidence for the direction of change that relativization developed the function of nominalization through a functional reanalysis of a lexical noun as a general nominalizer at the clause-edge: clause is the basic structural unit that enables the polyfunctionality of one word or particle. In the oldest Okinawan material *Omorosausi*, *si* indicated ‘person’ and always appeared as the head of a relative clause construction; it seems that *si* was lexicalized as a fixed construction rendering the meaning ‘the one who...’ in the fifteenth/sixteenth centuries. In the late eighteenth century, *si* ceased to stand for person but simply nominalizes the immediately preceding verb. The historical process, i.e. the nominal *si* ‘person’ that was always used as the head of relative clauses became a nominalizer at the same morphosyntactic position while bleaching the semantic specificity of earlier times, is well evidenced by historical materials. Furthermore, the clause-edge position facilitates the functional expansion from nominalizer into a stance-marking or sentence-final function of *si* in later stages. An intensive survey of the history of the Okinawan nominalizer *si* proves to give a fresh insight into the areal or typological issues in nominalization-relativization syncretism.

KAZUKO SHINOHARA & SHIGETO KAWAHARA

*Tokyo University of Agriculture and Technology & Rutgers University*

**A cross-linguistic study of sound symbolism: The images of size**

We argue that some cases of sound symbolism instantiate sound-meaning iconicity, and that some cases have phonetic bases. Our experiment focuses on the images of size. Our judgment study with speakers of English, Japanese, Chinese, and Korean showed cross-linguistic effects of three factors (vowel height, vowel backness, and voicing in consonants) on the images of size. Our results demonstrate that speakers can perceive the size of sub-oral cavities when they judge the size of nonce words.

The stimuli were 40 disyllabic nonce words (2 voicing types, 4 types of consonants, and 5 vowels all fully crossed). Participants rated the largeness of these words on a 1-4 scale. The results showed that (i) the lower the vowel, the larger the image, that (ii) back vowels ([a, o, u]) are larger than front vowels ([e, i]), and that (iii) voiced obstruents are larger than voiceless obstruents. These factors were statistically significant in all languages, except for height in Japanese and voicing in Korean.

Low vowels have a large sub-oral cavity because the jaw is lowered. Back vowels have a larger sub-oral cavity in front of the tongue because the tongue is backed and the lips are rounded. In pronouncing voiced obstruents, speakers expand their oral cavity to maintain a sufficient transglottal pressure drop to sustain voicing. Therefore, our results show that speakers are sensitive to these articulatory adjustments and deploy that knowledge in judging the images of nonsense words. We conclude that this finding instantiates a case of embodiment.

WILSON SILVA & KRISTINE STENZEL

*University of Utah & Federal University of Rio de Janeiro*

**Empowering language speakers to develop their own orthography: Two case studies**

In this paper, we report on our experience with the development of the orthography in two Eastern Tukanoan languages spoken in Northwest Amazonia: Desano and Koitiria. In the methodological approach we use, the actual practice of writing and the doubts and questions that arise from this practice are used from the onset as the basic material for discussion and analyses with the language community. As linguists, we employed our experience with the language and our technical knowledge to guide and facilitate speakers' analysis of their own language, empowering them as vital participants in the decision-making process for the orthography to be used. During the workshop in the communities, we focus on writing small texts in different topics so that we have material for analysis and we check for new questions and issues with the orthography. Speakers are asked to continue writing, using the orthography 'born' during the workshops, so we can revise, in other occasions, any issue that might arise.

The goal is to have in these languages an orthography that is 'accurate', i.e. a good representation of the supra-segmental structure of these languages, and also one that is 'easy to use' from the point of view of the speakers. In this paper we discuss the compromises we had to make in order to achieve these goals, the types of social and symbolic representations that came into play, and the practical and political issues related to orthographic variation and to standardization of an orthographic system for these two groups.

JAMES SLOTTA

*University of Chicago*

**Multifunctionality and inalienability: Propositional and discourse functions in Yopno possessive constructions**

Possessive constructions in Yopno – a non-Austronesian language of New Guinea – reveal form-functional mappings that suggest a particularly nuanced perspective on the 'discourse basis' of inalienability is required (compare, Paul Kockelman, "Inalienable possession as grammatical category and discourse pattern," *Studies in Language* 33(1): 25-68 and more generally, John W. Du Bois, "The Discourse Basis of Ergativity," *Language* 63(4): 805-855).

The formal distinction in Yopno between head- and dependent-marking patterns of possession codes distinctions in the propositional role of possessors simultaneously with distinctions in the possessor's discourse status. There is no simple one-to-one mapping of isolable morphological form onto a propositional and/or discourse function. Rather, the functions codable using limited formal means can be isolated by alternately maximizing and minimizing the propositional roles projected by a possessum, thereby maximizing the propositional function of possession-marking or maximizing the discourse function of possession-marking respectively.

Inalienable possessums in Yopno call forth neither extreme of discourse or propositional functionality. Inalienable possession, rather, manifests a unique mapping of form onto these two functional domains, thus constituting a formally recognizable category. As I show through an analysis of elicited and discourse data, the coding of inalienability in Yopno reflects neither a simple one-to-one mapping of discourse tendencies, nor is it independent of (discourse) functional concerns (Joanna Nichols, "On alienable and inalienable possession," *In Honor of Mary Haas*, 1988, ed. William Shipley, pp. 557-609, Berlin: Mouton de Gruyter).

MORGAN SONDEREGGER

*University of Chicago*

### **Testing for frequency and structural effects in an English stress shift**

A number of studies over the past 30 years have argued quantitatively for a role of word frequency in language change (e.g. Hooper 1976, Phillips 1984, 2006), in contrast to the Neogrammarian view that change is affected only by structural factors (e.g. phonetic context) and analogy. However, (1) the effect of frequency is generally not compared with those of proposed structural factors (2) there are often potential methodological problems. We consider (1-2) in the context of change in English disyllabic noun/verb (N/V) pairs (*cómbat* / *combát*), many of which have changed from {2,2} ( $N = \sigma\acute{\sigma} V = \sigma\acute{\sigma}$ ), to {1,2} over the past 400 years (Sherman, 1975). Phillips (1984) argues that lower-frequency N/V pairs are more likely to change; however, the effect shown is not statistically significant ( $p > 0.2$ ). We consider two datasets of N/V pairs pronounced {2,2} at a fixed time in the past (1700 or 1847) and either {1,2} or {2,2} today. We use mixed-effects logistic regression to test the effect of frequency and structural factors related to syllable weight on whether change occurs. The effects of frequency and structural effects are (weakly) significant ( $p < 0.1$ ) and approximately equal; in particular, lower frequency does increase the likelihood of change, confirming Phillips' hypothesis. However, the overall regressions have pseudo- $R^2 = 0.1$ – $0.15$ , suggesting that the effect of both frequency and the structural factors considered are very small.

YASUTADA SUDO

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### **Person restrictions in Uyghur indexical shifting**

Kaplan (1989) conjectured that the interpretation of indexical expressions ('I', 'you', 'now', 'here', etc.) is always dependent on the actual context of utterance and no context shifting operators (or monsters) exist in natural languages. However, since Schlenker's (1999, 2003) seminal work on Amharic, it is considered that this conjecture is too strong, and monsters do exist in attitude reports of at least certain languages (Anand 2006, Anand & Nevins 2004, Deal 2008, Fleck et al. 2009, Quer 2005; cf. Israel & Perry 1996). In this paper, we demonstrate that indexicals in finite complement clauses to attitude verbs in (Modern) Uyghur (Turkic; China and Kazakhstan) are evaluated against the reported contexts, and propose an account involving a monster operator (Shklovsky & Sudo, to appear). Furthermore, it is observed that there are restrictions on which of 1st and 2nd person features may appear shifted depending on the attitude verb, and propose a semantic account that derives the restrictions from the lexical semantics of the attitude verbs.

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### **Metathesis and reanalysis in Ket**

The Ket language isolate, the last surviving member of Siberia's Yeniseian language family, presents a stark typological contrast to the surrounding North Asian families (Uralic, Turkic, Tungusic, Mongolic). Ket noun plural formation involves not only the typical North Asian pattern of suffixation but also many hitherto unexplained irregularities where plurality is expressed by ablaut in the root vowel, often accompanied by tonal shift. Similarly unexplained patterns of suffixation vs. root ablaut occur in adjective and infinitive morphology. The present study explains root ablaut in all of these forms as originating from metathesis that affected combinations of bilabial or originally labialized velar with a non-labial segment. In the polysynthetic verb morphology, subsequent reanalysis of some of the metathesized segments created a number of morphological patterns that complicate a straightforward position-class description of the finite verb

morphology. Understanding the presence of a labialized series of velars in Proto-Yeniseian and the diachronic operation of a simple phonological rule of labial metathesis, which still operates synchronically on bilabial stops in Modern Ket phonology, provides a cogent explanation for the rise of many seemingly unrelated features of Yeniseian nominal and verbal morphology. It also demonstrates that Ket, while still typologically distinct from other North Asian languages in many ways, is not quite as morphologically bizarre as previously assumed.

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**A psychoacoustic correlate for phonological vowel height? Testing Syrdal & Gopals model with Brazilian Portuguese vowels**

This study tests Syrdal and Gopal's bark-difference model of phonological vowel identity on Brazilian Portuguese (BP). Based on an analysis of the Peterson and Barney (1952) data Syrdal and Gopal (1986) had concluded that the separation between [+high] vowels and [-high] vowels in English occurs at a critical distance of 3 Bark between F0 and F1, the bandwidth of the "center of gravity" effect (Chistovich et al. 1979). BP offers a more complete scenario to test the model's predictions about the role of F1-F0 in classifying vowels into high and non-high, with its two mid vowel height contrast, i.e. /e-ɛ/ and /o-ɔ/. The corpus for our study was the BP vowel production data independently collected by Escudero et al. (2009). The results demonstrate that the non-high vowels /e, o/ patterned with the high vowels /i, u/ in that they did not exceed the 3 Bark critical distance, while the vowels /ɛ, ɔ/ patterned with the vowel /a/ in exceeding it. These results have important implications for the phonological status of the F1-F0 bark difference model. It does not seem plausible to claim that the F1-F0 dimension corresponds to the feature [ $\pm$  high] for BP, mainly because it would entail claiming that mid vowels like /e, o/ are phonologically [+high]. A more credible explanation for BP is that the relevant feature is [ $\pm$ low]. We will also discuss whether this feature can be used to describe vowel quality in other varieties of Portuguese and in languages with different vowel inventories.

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**An empirical investigation of typicality and uniqueness effects on article choice**

( – Cancelled – )

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**Perception of illegal contrasts: Japanese adaptations of Korean coda obstruents**

A series of studies by Dupoux and colleagues (Dupoux et al. (1999), Peperkamp & Dupoux (2003), Vendelin & Peperkamp (2004), Peperkamp (2005)) have argued that all loanword adaptations occur during perception and that any structure that is phonotactically illegal in L1 is mapped to the closest legal native counterpart. This paper provides evidence partially contrary to their claims, from Japanese adaptations of Korean final coda obstruents, showing that Japanese speakers are able to perceive some phonotactically illegal contrasts.

While Korean loans for the most part behave similarly to the more well-documented western loans, showing deletion or epenthesis to resolve illegal codas, the focus of this paper is a new repair strategy that involves debuccalization of [p<sup>ɿ</sup>, t<sup>ɿ</sup>, k<sup>ɿ</sup>] to a glottal stop in word-final position as shown below.

[kimpapʔ]	>	[kimpaʔ]	‘Korean-style sushi roll’
[o̞ɕiŋo̞ɕʔ]	>	[o̞ɕiŋo̞ɕʔ]	‘marinated squid’
[hotʔəkʰ]	>	[hottoʔ]	‘grilled rice cake’

Thus, the presence of a final stop is perceived while the place of the stop is not, satisfying the Coda-Condition constraint in Japanese, which disallows contrastive place in coda (Kager 1999:131). Since Korean coda obstruents are strictly unreleased (Sohn 1999), it is not surprising that they are perceived without epenthesis (Jun 2002). However, glottal stop is not a phoneme but an optional variant of  $\emptyset$  in Japanese (Bloch 1950). What we are seeing then is a peculiar case where one illegal contrast – place in the coda – fails to get perceived, while a different illegal contrast – glottal stop vs. zero in the coda – does.

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**The processing of English spatial and temporal relations by advanced Chinese EFL learners**

( – Cancelled – )

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**Diglossia versus Register: Discursive classifications of two Sinhala varieties**

Though Sinhala is the native language of Sri Lanka’s majority Sinhalese population, it consists of two contrastively defined varieties commonly referred to as “Colloquial” and “Formal” Sinhala. In categorizing spoken Sinhala into a “formal” and “colloquial” variety, past research (DeSilva 1976; Gair 1992; Paolillo 1992) draws primarily on Ferguson’s (1959) notion of diglossia where two related languages are lexically and grammatically distinct and prescriptively used in different social domains. Formal Sinhala includes elaborate nominal declensions and verbal paradigms and is the primary medium of bureaucratic, state-funded education. Colloquial Sinhala is the informal variety used outside of institutional settings with simplified tense, pronominal systems, and a distinct lexicon. Problematizing diglossia theory’s (1) reliance on discrete, axiomatic categories and (2) dichotomous perspective of formal and informal social environments, I utilize Agha’s (2007) recent reworking of register theory (Biber & Finnegan 1994). This model improves on diglossic categorizations by prioritizing speaker discourse as a classificatory mechanism.

Data comes from ethnographic work with Sri Lankan university students, recorded in both formal classroom environments and casual, conversational settings. Colloquial usages in formal classrooms contest the way diglossia research treats Colloquial Sinhala as an umbrella term for any Sinhala spoken outside of institutional settings. Conversational parodies featuring code mixing of Formal Sinhala pronominal deictics (e.g. *ohu*, *aeya*) with “colloquial” speech question whether morphosyntax alone can definitively contextualize either variety. Turning to Agha’s (2007) approach, I highlight interdiscursive meanings connecting linguistic features to stereotypical personas, suggesting that such ideological links explain the registers’ composite recognition as divergent varieties.