

KEYNOTE SPEAKER ABSTRACTS
(All Keynote Addresses will be held in the Theater)

[THURSDAY, APRIL 20, 2017 - 6:00-7:00 PM]

Prof. Armin Schwegler

UC Irvine (aschwegl@uci.edu)

http://www.faculty.uci.edu/profile.cfm?faculty_id=2476

***Romance Linguistics in collaboration with Population Genetics (DNA):
Challenges and opportunities***

This talk offers an example of how population geneticists and linguists have collaborated lately in an attempt to reconstruct the African origins of Latin America's Black (and mulatto) populations. Part 1 of the talk will provide a general overview of how this interdisciplinary collaboration has borne fruit in the past five years, and what techniques have been applied to advance the research. Part 2 then examines some of these results close up to illustrate the considerable challenges and enormous opportunities that such collaboration produces.

[FRIDAY, APRIL 21, 2017 - 11:00-12:00 PM]

Prof. Pilar Prieto

ICREA-Universitat Pompeu Fabra (pilar.prieto@upf.edu)

<http://prosodia.upf.edu/home/en/index.php>

***Prosodic and gestural bootstrapping mechanisms in language learning: evidence from
Romance***

Recent research has shown how prosodic and gestural features of language are tightly interconnected in time and in semantic function. Functionally, they constitute powerful cues for parsing speech, marking of information status and pragmatic information. In this talk, I will discuss several experiments carried out in our research group with a Catalan population which show how integrated prosodic and gestural features of language act as scaffolding mechanisms of language learning, e.g., they facilitate the recall of focused information (Experiment 1), help boost narrative abilities (Experiment 2), and act as precursors for later language development (Experiment 3). Based on these findings and other evidence from infants' pragmatic development I will propose that prosodic and gestural features of language act as pragmatic bootstrapping mechanisms in language development. I will conclude that a multimodal approach is essential to understanding language learning, and that it can be successfully applied to language teaching and language treatment contexts.

[FRIDAY, APRIL 21, 2017 - 5:30-6:30 PM]

Prof. Thierry Nazzi
CNRS and Université Paris Descartes

<http://lpp.parisdescartes.cnrs.fr/people/thierry-nazzi/>

Finding word forms in the speech stream : the French-learning infant perspective

Speech is a continuous signal, and this holds also for infant directed speech. Hence, one prerequisite for learning words is for infants to be able to segment potential word forms from fluent speech. Many studies have shown that this ability emerges around 6 months of age in many languages, and have established that infants use a combination of cues that partially mark word boundaries. While some of these cues might be language-general (transitional probabilities), many of them are language-specific (prosodic cues, phonotactic cues, knowledge of known words...). We will present work on the developmental trajectory of early word segmentation in French, a Romance syllable-based language, in reference to what is known for early word segmentation in Germanic, stress-based English. First, we will argue that two main cues play a major role at the time of emergence of segmentation abilities, which are radically different. On one hand, transitional probabilities, which are language-general and do not require language-specific learning; on the other hand, rhythmic cues, which are language-specific (syllabic unit for French, trochaic unit for English) and require the acquisition of the basic rhythm of the native language. The studies presented will highlight the respective contribution of language-general and language-specific abilities in early segmentation, and bring support to the “early rhythmic-based segmentation hypothesis”. Second, we will explore how differences in basic rhythm might also relate to differences in the way phonological information is used in the process of learning and recognizing words/word forms. We will present studies showing that a consonantal bias in lexical processing, consistently found from early toddlerhood in French but only by 30 months in English, emerges between 6 and 8 months in French. Taken together, these studies will highlight both the commonalities and the specificities of the emergence of word segmentation and early lexical representation and access in French-learning infants.

[SATURDAY, APRIL 22, 2017 - 6:00-7:00 PM]

Prof. Paola Merlo

University of Geneva, Switzerland (Paola.Merlo@unige.ch)

<http://clcl.unige.ch>

Quantitative Computational Syntax: some initial results on Romance and other languages

In the computational study of intelligent behaviour, the domain of language is distinguished by a complex and sophisticated domain theory and by large amounts of observational data in many languages. The main scientific challenge for computational linguistics is the creation of theories and methods that fruitfully combine large-scale, corpus-based approaches with the linguistic depth of more theoretical methods. I report here on some recent and current work from our group, where large-scale, data-intensive computational modelling techniques are used to address theory-driven linguistic questions in Romance and other languages. On the one hand, we investigate the factors that govern one of the most apparent sources of diversity across languages: the order of words. First we report on work that investigates whether typological frequencies are systematically correlated to abstract syntactic principles at work in structure building and movement. Then, we investigate higher level structural principles of efficiency and complexity: the availability of several large-scale treebanks allows us to ask this question in a novel way. In a large-scale, computational study on Romance languages, we confirm a trend towards minimisation of the distance between words across languages even for short spans. These results raise issues on the role of efficiency and complexity in language use. On the other hand, much like the comparative method in linguistics, cross-lingual corpus investigations take advantage of any corresponding annotation or linguistic knowledge across languages. The third case study shows that corpus data and typological data involving the causative alternation exhibit interesting correlations explained by the notion of inner causation of an event. This line of work leverages both similarities and differences across languages of the world to discover universal properties and develop truly cross-lingual NLP tools.

[SUNDAY, APRIL 23, 2017. 11:00-12:00 NOON]

Prof. Gregory Guy

New York University (gregory.guy@nyu.edu)

gregoryguy.com

Trajectories of change in Spanish and Portuguese in the Americas

The varieties of Spanish and Portuguese spoken in the Americas have diverged significantly from their peninsular sources, and from each other, in the half-millennium since colonization. Contact with indigenous and African languages were significant drivers of change historically, and contact with other languages continues to be a factor,

such as the contact with English for Spanish in the US. Other sources of change are also evident. Spontaneous innovations have appeared, such as the contemporary devoicing of 'zheismo' variants in Platense Spanish, and the expansion of the new 1pl pronoun *a gente* in Brazilian Portuguese. Dialect leveling and standardization are widely evident, reducing the use of non-standard or stigmatized linguistic variables such as consonant lenitions and deletions and absence of agreement. These processes are likely driven by expansion of access to education and improved mobility.