UCSD

Quantitative Measures in Morphology & Morphological Development Workshop

Hosted by the UCSD Center for Human Development

January 15-16, 2011

UC San Diego
La Jolla, CA

THEME

Linguistics in general and morphology in particular are undergoing an important reconceptualization concerning their favored objects of inquiry, their methodologies, and consequent hypotheses about theory construction. In the broadest terms this relates to detailed descriptions of wide ranges of typologically different languages, reliance on experimental and computational methods, and hypotheses bearing on the nature of theories resulting from the quantitative modeling of complex interactions among multiple independent systems. Predictably, all of these new perspectives on the nature of language raise novel questions concerning language learning (Lappin and Clark in press) and language evolution (Fitch 2010).

Language models formulated in terms of inviolable, but parameterizable, principles and restricted to so-called *core phenomena* are gradually being replaced by theories which examine broader expanses of grammar sensitive both to surface language variation and the gradient nature of phenomena. This trend is characterized broadly across several linguistic subdisciplines in Evans and Levinson (2009, 2010). The nature of these changes align linguistics more with recent dynamic systems perspectives on analysis in the developmental sciences (Oyama et. al. 2000, Weber and Depew 2003), than with the familiar deductive approaches that have characterized the tranformational generative philosophy of language. There appears to be a convergent intuition within several developmental disciplines, i.e., (ecological) developmental evolutionary biology (Gilbert and Eper 2009, Barberousse et. al. 2009, Pigliucci and Müller 2010) and developmental (constructivist) psychology (Gottlieb 1991, 2000, Elman et. al. 1997, Karmiloff-Smith 1992, M. Blumberg 2005, Stiles 2009, among others), that many old, often forgotten, insights find fruitful reformulation when modern techniques are applied to new organisms that may be outside the model systems sanctioned by previous research: the future of the field, then depends on identifying more appropriate model systems. Gilbert 2009:68 concludes. "The new model systems not only reflect a new approach to developmental biology; they also reflect a new model of reality." The same might be said of linguistics.

In the spirit of synthesis within the developmental sciences, the present workshop explores issues bearing on quantitative (largely, information-theoretic, statistical, simulational) techniques applied to complex, typologically-diverse morphological and lexical systems. It attempts to identify instructive morphological model systems that provide a new view on the nature of explanation for morphological phenomena and related issues concerning morphological learning and evolution. The speakers, despite divergent interests and analytic approaches, share a belief in the primacy and theoretical centrality of words and paradigms for the understanding of morphological systems.

PROGRAM

Saturday, January 15, 2011

8:45am	**Continental Breakfast**
9.15am - 10.15am	**Paradigmatics, syntagmatics, and the agglutinative ideal** Farrell Ackerman (UCSD) and Rob Malouf (SDSU)
10.15am - 11.15am	**Measuring inflectional complexity: French and Mauritian** Olivier Bonami (Université Paris - Sorbonne), Gilles Boyé (Bordeaux U.) and Fabiola Henri (U. of Mauritius)
11.15am - 12.15pm	**Explaining inflectional defectiveness: Information theory and the inflectional paradigm from synchronic and diachronic perspective** Andrea Sims (Ohio State University)
12.15pm - 1.30pm	**Lunch Break**
1.30pm - 2.30pm	**Item and pattern morphology** Jim Blevins (Cambridge University)
2.30pm - 3.30pm	**Entropy, relative entropy, and naive discriminative learning** Harald Baayen (University of Alberta)
3.30pm - 3.45pm	**Break**
3.45pm - 4.45pm	**The Effective Complexity of morphological systems: Can we hope to ever obtain a complete and correct description of a language's morphology?** Fermín Moscoso del Prado Martín (Laboratoire Dynamique du Langage)
4.45pm - 5.45pm	**Lexical learning and lexical diffusion: studies on dispersion, social factors, and cultural consumption** Paula Chesley (University of Minnesota)

PROGRAM

Sunday, January 16, 2011

8:45am	***Continental Breakfast***
9.15am - 10.15am	***Input, uncertainty and the early course of language development*** Colin Bannard (University of Texas at Austin)
10.15am - 11.15am	***Information structure and learning: The artificiality of grammar*** Michael Ramscar
11.15am - 12.15pm	***Entropy measures and predictive recognition as mirrored in gating and lexical decision over multimorphemic Hungarian noun forms*** Csaba Pléh *(*BME Kognitív Tudományi Tanszék), Kornél Németh *(*BME Kognitív Tudományi Tanszék), Judit Fazekas *(*BME Kognitív Tudományi Tanszék) and Daniel Varga (MOK BME)
12.15pm - 1.30pm	***Lunch Break***
1.30pm - 2.30pm	***Blinkered vision: Sources of opacity in inflectional paradigms*** Raphael Finkel (U. of Kentucky) and Greg Stump (U. of Kentucky)
2.30pm - 3.30pm	***Parsing with paradigms: A realizational approach for specification and statistical learning of grammatical descriptions*** Reut Tsarfaty (Uppsala University)
3.30pm - 3.45pm	***Break***
3.45pm - 4.45pm	***Self-organization in the English suffix system*** Mark Lindsay (SUNY, Stonybrook)
4.45pm - 5.45pm	***Towards a stochastic model of linguistic competence*** Shalom Lappin (King's College London)