

## Talks of SFB632

**Project:** A1

**Speaker:**

Yi Xu (University College London & Haskins Laboratories)

**Time:** Thursday, 10th Nov, 2005

**Place:**

University of Potsdam, Golm, Room 24.078

**Title:** From tonal alignment to segmental alignment and beyond

**Abstract:**

The finding of strict tone-segment alignment in many languages in recent research raises the question about the temporal organization of speech sounds in general. In this talk we explore the possibility that tonal alignment patterns can lead to the discovery of basic principles of temporal organization in speech. Based on recent findings about both tonal and segmental alignment, we propose a general model of temporal organization, in which the syllable is the basic timing structure that specifies the temporal alignment of consonants, vowels, tones and phonation registers. All these sounds are unified under the term phone defined as a collection of unidirectional articulatory movements toward a simple or composite target. The phones are temporally organized by the syllable under three principles: co-onset of initial C and V, sequential offset of coda C, and full synchronization of tone and phonation register with the syllable. Under this model, true coarticulation occurs only between initial C and V, and there is no anticipatory C to V coarticulation, no cross-consonantal V-to-V coarticulation, and no carryover coarticulation of any kind. As a result, speech production can be viewed as largely sequential and speech sounds largely segmentable.