Course plan
Biolinguistics: An introduction

Instructor: Massimo Piattelli-Palmarini
Professor of Cognitive Science
University of Arizona

Description
This course will cover Biolinguistics under a particular angle: a modern naturalistic, but basically non-adaptationist, theory of evolution, and an inquiry into the biology and evolution of language as we know it. We will start with data and rationales explaining why we are justified in thinking that there is a biology of language. We will then proceed to an analysis of some language pathologies (we will see the best syntactic analyses of agrammatic aphasia - Josef Grodzinsky, Naama Friedmann, Luigi Rizzi, Sergey Avrutin, Nino Grillo and others). Next we will examine “mirror” pathologies”, that is, cases where language is intact, but general intelligence is affected such as Specific Language Impairment (SLI), Williams Syndrome, Spina Bifida, and the case of the savant Christopher. We will then proceed to the genetics of language in a modern perspective (after the disillusionment of the genome project). We will have a close look at data and theories of epigenetics and suggest possible links with language. Finally we will proceed to another novel and promising avenue of inquiry: We will review the “return of the laws of form” in biology in general and point out interesting parallels with the role of physical, self-organizational and computationally optimal mechanisms found in language at various levels (syllables, prosody, syntactic trees, phases). Promising parallels with the Minimalist Program will be detailed and new ways of approaching the biological foundations of language and language evolution will be offered.

Basic references:


Language deficits


**Mirror deficits**

**The case of FOXP2**

**Language evolution**

Christiansen, M. H. and N. Chater (2008). "Language as shaped by the brain." Behavioral and Brain Sciences 31: 489-558. (see a commentary therein by Tom Bever, Roeland Hancock and MPP)

**The Laws of Form**


Massimo Piattelli-Palmarini “*What is language, that it may have evolved*” in: Richard Larson et al, (Eds.) *Evolution of Language*. CUP (2010)