



THE UNIVERSITY OF  
CHICAGO

Department of Psychology



# Brains, Genes and Language Evolution

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Why is language the way it is, and how did it come to be that way? Answering these questions requires postulating genetic constraints on language. A key challenge for language evolution research is therefore to explain whether such genetic constraints are specific to language or whether they might be more general in nature. In this talk, Dr. Christiansen argues that traditional notions of universal grammar as a biological endowment of abstract linguistic constraints can be ruled out on evolutionary grounds. Instead, the fit between the mechanisms employed for language and the way in which language is acquired and used can be explained by processes of cultural evolution shaped by the human brain. On this account, language evolved by ‘piggy-backing’ on pre-existing neural mechanisms, constrained by socio-pragmatic considerations, the nature of our thought processes, perceptuo-motor factors, and cognitive limitations on learning, memory and processing. Using behavioral, computational and molecular genetics methods, he then explores how one of these constraints -- the ability to learn and process sequentially presented information -- may have played an important role in shaping language through cultural evolution. He concludes by drawing out the implications of this viewpoint for understanding the problem of language acquisition, which is cast in a new, and much more tractable, form.

***When: Thursday, May 26<sup>th</sup>, 2011, 4:00pm***

***Where: Harper 130, 1116 E. 59th Street***