A solution to the logical problem of language evolution: Language as an adaptation to the human brain

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This paper argues against the viability of a traditional genetically-specified universal grammar (UG) on evolutionary grounds. We show that such a UG could not have arisen either by adaptationist and non-adaptationist evolutionary mechanisms. This "logical problem of language evolution" applies equally to traditional and minimalist conceptions of the innate faculty of language. We consider whether language might be shaped by cultural transmission alone, arguing that language is crucially influenced by a broad range of constraints including thought, perceptuo-motor factors, cognitive capacities, and social-pragmatic forces. We explore the restricted conditions under which genes can co-evolve with language.