The language organism

How do humans manage to rapidly learn and understand their native language? One hypothesis is that the brain has adapted through natural selection to develop mechanisms for language acquisition, and that we contain an innate, biologically determined universal grammar. Others agree that these brain mechanisms have evolved, but not through evolutionary adaptation.

Professors Morten Christiansen and Nick Chater propose it is rather the language itself that has evolved and adapted to the brain rather than the other way round. They argue that a universal grammar would not evolve biologically; language is too variable to provide the necessary selectional pressure for common linguistic constraints. Instead language should be viewed as an 'organism', a complex system which has evolved in a mutually beneficial relationship with humans. Languages are shaped by selection pressure from each generation of language users - traits that are easy to learn and use will become more prevalent, while more difficult traits will disappear.

Christiansen and Chater argue that the process of language evolution may apply similarly to a wider cultural context, and that, "culture has been shaped to fit our prior cognitive biases".

You can watch a podcast interview (in the Evolution and Society topic) in which Professor Nick Chater, from the ESRC Centre for Economic Learning and Social Evolution (ELSE), talks about the evolution of language.

Further reading

- Morten H, Christiansen, Nick Chater: " Language as Shaped by the Brain"

Darwin Today has been produced for Darwin Year celebrating Charles Darwin's bicentenary. The resources highlight the continuing importance of Darwin's theory of evolution by natural selection in contemporary research. **Darwin Today** is produced by Research Councils UK (www.rcuk.ac.uk)