



Measuring Language in the Brain

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Attempts to understand the relationship between language and the brain have a long history. Recent theoretical, technological, methodological and analytic developments have provided us with the opportunity to look a little closer at the workings of the intact and damaged brain. In this talk I will give an overview of recent attempts to measure brain activity related to Language processes. One important aspect of this endeavour is that it is truly multi-disciplinary, involving cooperation between linguists, psychologists, mathematicians, geneticists, physicists and others. This level of scientific integration is challenging. It requires flexibility and a willingness to reconceptualise problems and to recognize common interests, but it returns synergistic results. Current best practice in neuro-linguistic research not only uses the available methods, analytic approaches and technologies to reveal the neural architecture and processes underpinning language but also use language as a vehicle to probe and extend the limits of the methods, analytic approaches and technologies. I will try to survey this multi-disciplinary landscape by addressing three basic questions:

- where - what parts of the brain are associated with language use?
 - when - what is the time course of language processing?
 - how - what mechanisms support the processing of language?
- and maybe even a little why.