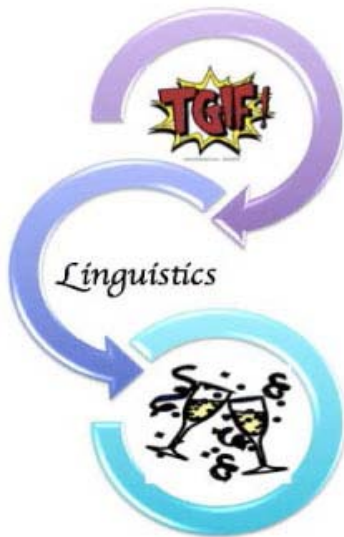


TGIF: The NTU Linguist Chatroom

Join us!
Friday, 8 April 2016, 2.30pm
@ HSS Conference Room (HSS-05-57)



The Reasoning Brain

Logically, deductive reasoning is a closed system and thus a good candidate for a cognitive module. However, neuropsychological research into the neural basis of reasoning has failed to identify a coherent module specifically activated during logical reasoning. Rather, the data point to a fractionated system that is dynamically configured in response to certain task and environmental cues. We have explored four lines of demarcation (Goel, 2007): (a) systems for processing familiar and unfamiliar content; (b) conflict detection/resolution systems; (c) systems for dealing with determinate and indeterminate inferences; and (d) systems for dealing with emotionally laden content. Furthermore, meta-analysis studies indicate that different logical forms (e.g. categorical syllogisms, conditionals, and transitive inferences) also recruit different neural systems. I will review this evidence and discuss the implications for psychological theories of reasoning.

Speaker

Vinod Goel is Professor of Cognitive Neuroscience at York University.



Prof. Goel is interested in understanding the cognitive, computational, and neural basis of rational decision-making and emotional processing in humans, and more recently, the interaction between the two. His primary methodologies include brain imaging (fMRI & PET), patient studies, and computational modelling. Prof. Goel also takes an active interest in the philosophical/foundational issues that beset cognitive science.

The TGIF seminar series is organised by
 the Division of Linguistics and Multilingual Studies, HSS

