

Cogs511 Spring 2010 Project Readings

Dienes (2008) gives an extensive overview of the paradigms to measure the unconscious knowledge that subjects have. It is also a good introduction to general conceptual issues about unconscious knowledge and related philosophical frameworks.

The study of Persaud et al. (2007) is the primary article for term project. They propose “post-wagering paradigm” as a measure to (lack of) awareness of unconscious knowledge. They conducted three experiments, namely visual discrimination in a blind sight patient, artificial grammar learning task and Iowa gambling task. The task for the project will be to model the artificial grammar learning experiment.

Pasquali et al. (2009) discuss the results of three metacognitive networks that they implement to simulate three experiments in Persaud et al. (2007).

The other two articles are rather outdated. Servan-Schreiber and Anderson (1990) propose a way to model the artificial grammar learning task by competitive chunking. The study dates before ACT-R, yet it may still be helpful for the project models.

Reber 1967 article is a classical one and as you will notice there is reference to this study in almost all implicit learning articles. So, it is in the list not as a strict requirement but rather to provide a historical background.

References

Dienes, Z. (2008) Subjective measures of unconscious knowledge. *Progress in Brain Research*, 168, 49 - 64. Retrieved from:
http://www.lifesci.sussex.ac.uk/home/Zoltan_Dienes/Dienes%20Kolkata.pdf

Persaud, N., McLeod, P., & Cowey, A. (2007). Post-decision wagering objectively measures awareness. *Nature Neuroscience*, 10, 257-261.

Pasquali, A., Timmermans, B., & Cleeremans, A. (2009). Metacognitive networks and measures of consciousness. In *Proceedings of the 31st Annual Meeting of the Cognitive Science Society*, 2620- 2625.

Servan-Schreiber, E. & Anderson, J. R. (1990). Learning artificial grammars with competitive chunking. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 16, 592-608.

Reber, A.S. (1967). Implicit learning of artificial grammars. *Journal of Verbal Learning & Verbal Behavior*, 6, 855-863.