Individual differences in implicit learning: Is Reber wrong?

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Abstract: Reber (1989) hypothesized that implicit learning is an evoluonarily old system. From this idea, Reber deduced a number of predictions: 1) IL should not vary with age or IQ, 2) IL should be robust in the face of interfering tasks and (certain) forms of neurological damage. Siegert et al (2006) used a meta-analysis to show that Parkinson's patients have important deficits in IL. In the current study we performed meta-analyses in three pools of IL studies: 1) studies with dual tasks, resulting in considerable differences between IL with and without dual tasks; 2) studies into age differences, indicating that there is no relationship between IL ability and age (although there was a trend towards a curvi-linear relationship); 3) studies into IL and IQ, indicating a correlation between IQ and implicit learning abilities. Hence three of four results are inconsistent with Reber's predictions.

Reber, A.S. (1989). Implicit learning and tacit knowledge. Journal of experimental psychology: general, 118 (3), 219 235.

Siegert, R.J., Taylor, K.D., Weatherall, M. & Abernethy, D. (2006). Is implicit sequence learning impaired in Parkinsons disease? A meta-analysis. Neuropsychology, 20 (4), 490 495.