Creating meaningful groups and the memory palace technique

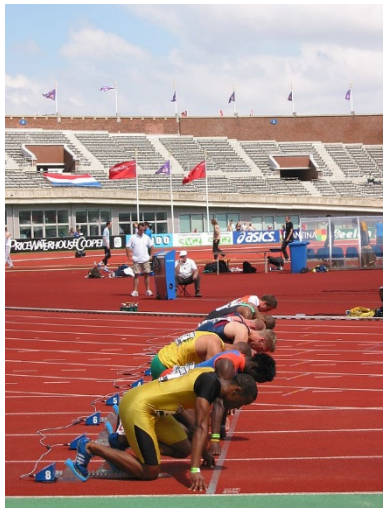
Barbara Oakley, PhD

- Garlic 
- Rose 
- Hawthorn 
- Mustard 

GRAHAM

1965

11.0

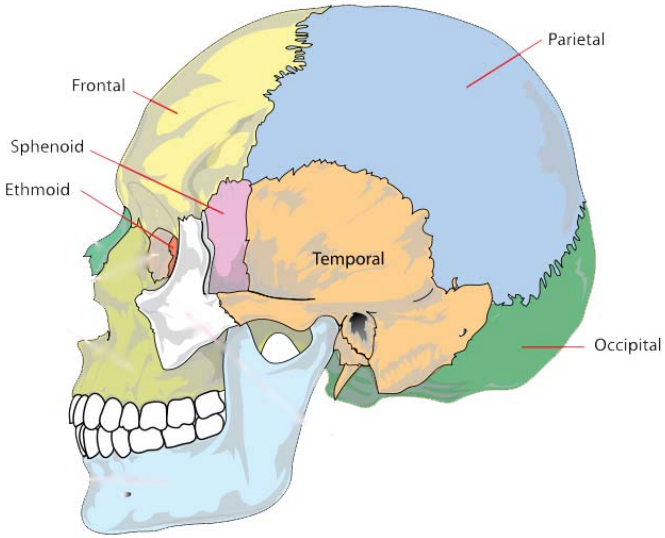


75

Memorable mnemonics

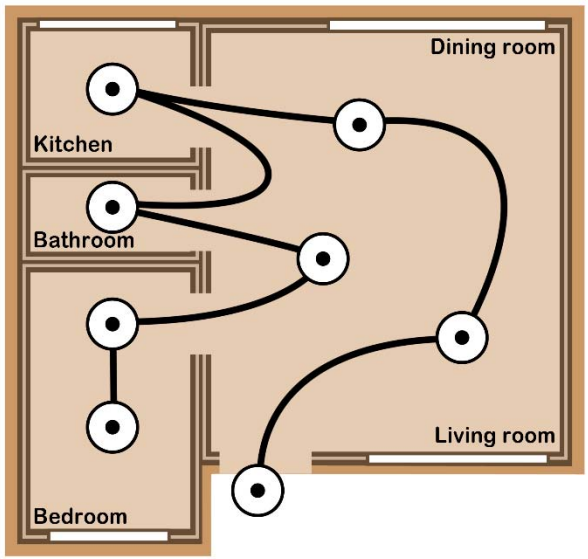
Some Lovers Try Positions that They Can't Handle

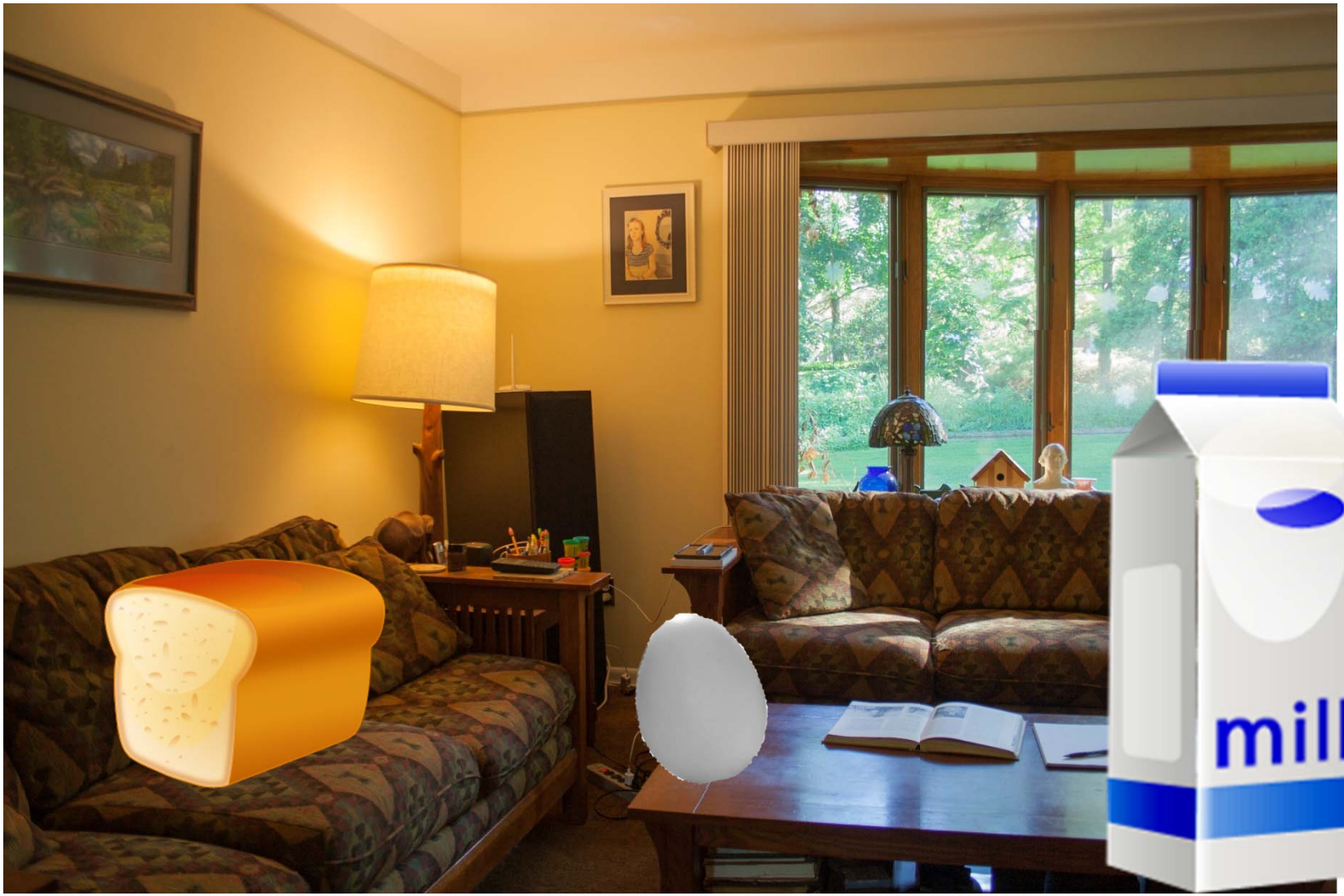
A = Scaphoid B = Lunate
C = Triquetrum D = Pisiform
E = Trapezium F = Trapezoid
G = Capitate H = Hamate



Old People From Texas Eat Spiders

Memory palace technique




milk

How chunks, long-term working memory and templates offer a cognitive explanation for neuroimaging data on expertise acquisition: A two-stage framework

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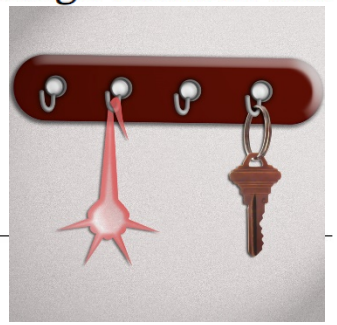

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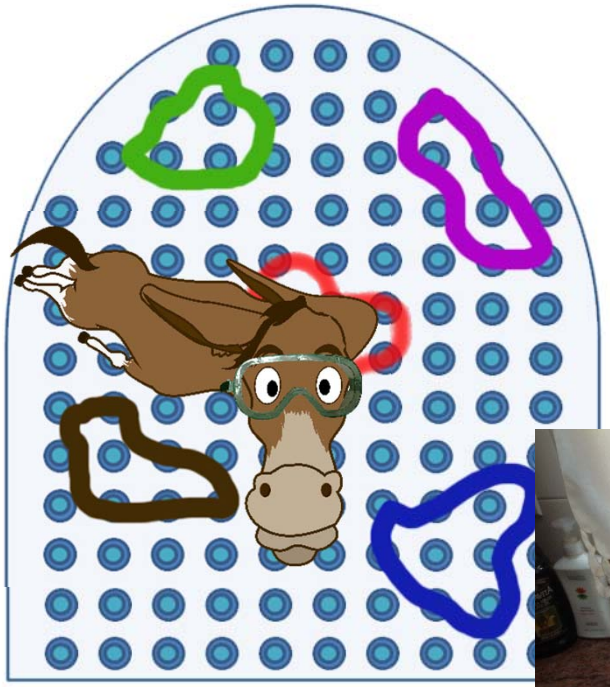
ABSTRACT

Our review of research on PET and fMRI neuroimaging of experts and expertise acquisition reveals two apparently discordant patterns in working-memory-related tasks. When experts are involved, studies show activations in brain regions typically activated during long-term memory tasks that are not observed with novices, a result that is compatible with functional brain reorganization. By contrast, when involving novices and training programs, studies show a decrease in brain regions typically activated during working memory tasks, with no functional reorganization. We suggest that the latter result is a consequence of practice periods that do not allow important structures to be completely acquired: knowledge structures (i.e., Ericsson and Kintsch's retrieval structures; Gobet and Simon's templates) and in a lesser way, chunks. These structures allow individuals to improve performance on working-memory tasks, by enabling them to use part of long-term memory as working memory, causing a cerebral functional reorganization. Our hypothesis is that the two brain activation patterns observed in the literature are not discordant, but involve the same process of expertise acquisition in two stages: from decreased activation to brain functional reorganization. The dynamic of these two physiological stages depend on the two above-mentioned psychological constructs: chunks and knowledge structures.



$f = ma$

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Relevant Readings

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