Human Memory Outline 5: Short-Term, Working Memory

I. Capacity of STM - The Magical Number 7 ± 2 ([George Miller's article](#))
        A. Recoding - Chunking
         B. Mnemonic devices
                Grouping
                Hierarchies

        C The Magical Number 4 - [Cowan and the FOCUS OF ATTENTION](#)

         [BBS Article abstract](#)

         [Full Article:](#)
        THE MAGICAL NUMBER 4 IN SHORT-TERM MEMORY: A RECONSIDERATION OF MENTAL STORAGE CAPACITY

II. Duration & Forgetting in STM
        A. STM Decay - Brown-Peterson Task
              1. Procedure
              2. Results
        B. Interference in STM
              1. Waugh & Norman (1965)
              2. Proactive interference (PI)

III. Codes in STM
        A. Verbal / Acoustic-Articulatory Codes
              Rhyming stimuli (Conrad 1963,1964)
              Long vs. short words
        B. Semantic Codes
              Release from Proactive Inhibition
        C. Visual Codes
              Visual/Name letter matching (Brooks, 1968))
              Mental rotation ([ONLINE DEMO](#))

IV. Shepard & Metzler "Mental Rotation of Three-Dimensional Objects"
        A. Problem/objectives
              1.
              2.
        B. Procedure
              1.
              2.
              3. the pictures
        C. Variables
              1.IV's
              2. DV
        D. Results/conclusions
              1.
              2.
              3.

V. Sternberg (1966) "High-Speed Scanning in Human Memory" ([download demo](#), Mac only)
        A. Problem - How is STM searched?
              1.
              2.
        B. Procedure
              1.
              2.
              3.
        C. Variables
              1. IVs
              2. DV
        D. Results/conclusions
              1.
              2.

VI. Working Memory
        A. Components of Baddeley's Model (see figure 4-13)
              1. Executive control system
              2. Articulatory loop
              3. Visuo-spatial scratch pad
        B. Working Memory Research
              1. Dual-task procedures

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        2. Other procedures
                 Phonological similarity
                 Word length effects
C. Application of Working Memory Model
        1. Memory capacity

        2. Child development

D. Overview/Summary of Working Memory
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Return to home of **Psychology 279 Human Memory**

Send questions & suggestions to psyscott@mizzou1.missouri.edu.

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