Sensory Storage

I. Context
II. Visual Sensory Store
III. Auditory Sensory Store
IV. Other Senses?
V. Summary

I. Context

Atkinson and Shiffrin (1971) (again)

Segner (1740, as cited in Baddeley, 1999) attached a glowing ember to a rotating wheel.

Sperling (1960) research at Bell Labs

II. Visual Sensory Store

A. A Brief History

Segment (1740, as cited in Baddeley, 1999) attached a glowing ember to a rotating wheel.

Sperling (1960) research at Bell Labs
II. Visual Sensory Store

B. Demonstrations
   Spinning light
   Whole Report vs Partial Report
      (Sperling’s Experiments)
   Targeted Report (Averbach & Coriell, 1961)

Visual Sensory Memory (cont)

C. Results of Sperling’s Experiment

Visual Sensory Store (cont)

D. Properties of Visual Sensory Store
   1. capacity
      unlimited
   2. forgetting
      rapid decay: 1/4 to 1/3 sec
      masking
   3. coding
      visual pattern
opponent processing of cone outputs

http://personales.upv.es/gbenet/teoria_del_color/water_color/
Visual Sensory Store versus After Images

<table>
<thead>
<tr>
<th>Visual Sensory Store</th>
<th>After Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very brief (250 msec)</td>
<td>Lasts several seconds to a week</td>
</tr>
<tr>
<td>True color</td>
<td>Complementary color</td>
</tr>
<tr>
<td>High acuity</td>
<td>Fuzzy</td>
</tr>
</tbody>
</table>

III. Auditory Sensory Store

A. The 3 eared man experiment
Darwin, Turvey, and Crowder (1972)

The 3 eared man experiment

Results
III. Auditory Sensory Store (cont)

Three Eared Students Demonstration

B. The Modality Effect (Conrad & Hull, 1968)

- Serial Position
- Percent Correct
- Percent Correct

C. Suffix Effect (Crowder 1972)

- Percent Correct
- Percent Correct
IV. Other Senses?

A. Tactile Sensory Store
   Tactile modality and suffix effects.
   see Mahrer & Miles (1999)

B. Smell
   Olfactory recency and suffix effects.
   see Miles & Jenkins (2000).

C. Taste?

V. Summary

A. Function
   attention
   pattern recognition

B. Common Properties
   large capacity
   brief duration
   modality bound