Taxonomy of memory types

- **Autobiographical memory**
  - Memory for our life experience
  - A small proportion of people seem to have a qualitatively superior form
  - Questions:
    - What type of memory is superior?
    - Are their memories accurate?
    - Are the details complete?
    - What retrieval cues do they use?

- **Caudate nucleus**
  - Involved in skill learning and OCD
    - Both involve repetitive behavior
    - Mental and physical
  - 7-8 standard deviations larger in SAM subjects

Outline for LTM classes

- Comprehension and memory
- Different types of long-term memory
- Autobiographical memory
- False memory

<table>
<thead>
<tr>
<th>DRM procedure</th>
<th>(Deese, 1959; Roediger &amp; McDermott, 1995)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement for Figure 8.16:</td>
<td></td>
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<tr>
<td>False recall of theme word (critical level) = 0.55</td>
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</tbody>
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<thead>
<tr>
<th>Window</th>
<th>Smell</th>
<th>Sweet</th>
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<tr>
<td>Door</td>
<td>Nose</td>
<td>Sour</td>
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<td>Glass</td>
<td>Breathe</td>
<td>Candy</td>
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<td>Pane</td>
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<td>Sill</td>
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<td>House</td>
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<td>Open</td>
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<td>Curtain</td>
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<td>Reek</td>
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<td>View</td>
<td>Stench</td>
<td>Chocolate</td>
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<td>Breeze</td>
<td>Fragrance</td>
<td>Heart</td>
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<td>Sash</td>
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<td>Cake</td>
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<td>Screen</td>
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<td>Tart</td>
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<tr>
<td>Shutter</td>
<td>Rose</td>
<td>Pie</td>
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</table>
DRM procedure

- The theme helps us recall target words
  - More hits with a theme than without
- But the theme word intrudes
  - High rate of false alarms for the theme word
  - Semantic memory intruding on episodic memory

Recognition vs. recall

- Often we can recognize something that we can’t recall
  - Recognition can be more sensitive than recall
- But recognition accuracy depends on the distractors
  - The more similar they are to the target, the more errors people make
  - Especially when the target is absent

Eyewitness memory

- Involves a recognition task
  - Picking someone from a photo array, or lineup
- The target may or may not be present
  - The police don’t know, neither does the witness

The case of Jennifer Thompson

- Questions:
  - How well did Thompson’s confidence in her memory predict its accuracy?
  - What factors probably contributed to Thompson’s error?
The case of Jennifer Thompson

- What factors probably contributed to Thompson’s error?
  - Similarity of Cotton and Poole
  - The target being absent
  - The detective reinforcing Thompson’s choice
  - Misplaced familiarity (aka source confusion)

Misplaced familiarity

- In the lineup, Cotton probably looked familiar to Thompson
  - But the source of the familiarity was the photo array, not the crime scene
  - This source information was not accurately represented in Thompson’s memory
- What type of memory is source memory?
  - Episodic

Related: Reality monitoring

- Monitoring whether an event really happened
- Examples:
  - You imagine someone holding an apple
    - Later, you may confuse imagining and seeing
  - You intend to lock the car door
    - Later, you may confuse intending and acting
- Made more difficult by automaticity
  - Attention is the gateway to episodic memory