Degree of category membership
- Rate **typicality** on a scale of 1-7, with 1 being very typical
- Consistently rated some members as more typical than others
  - For sports, football was very typical while weight lifting was not
- Some are seen as more typical than others more rapidly
- People disagree about whether atypical members are even members of category
- They change their mind over time about the same items

Event concepts
- **Scripts** are event schemas that involve stereotypic sequences of actions
  - People use scripts to reason about prototypical events
  - For example, visiting a doctor or ordering in a restaurant guide comprehension of events and influence final memory for events
  - The stereotypic sequence was sit down, look at menu, order meal, eat food, pay bill, and leave
  - Participants showed greater tendency to recall actual items from the stories or to recognize actual items than to misrecognize foils that were not in the stories

Abstraction theories versus exemplar theories
- **Abstraction theories** hold that we actually abstract the general properties of a category from the specific instances we have studied and that we store those abstractions
  - Schema theory is an abstraction theory
  - Example is there is a list (9,9,6,9,9,5), but we only store the mean (8)
  - Central instances are more similar to the abstract representation of the concept
  - Activation in the prefrontal cortex
  - Faces, birds, prototypes
  - People will give typicality ratings for odd numbers
- **Exemplar theories** hold that we store only the specific instances and that we infer the general properties from these instances
  - Observe the full list and would judge 8 as a good member of the category because its similar but not as good as 9
  - Central instances will be more similar, on average, to other instances of a category
  - Predict that specific instances someone has encountered should have effects that go beyond any effect of some representation of the central tendency
  - Activation in the occipital visual areas and the cerebellum
  - Activation of memory and the hippocampus
  - Opera singers (instances)

**War of the ghosts**
- Two men heard war-cries and thought there was a war-party
- One of the men went to go fight with the others
- He heard them say that he (an Indian) had been hit and thought they were ghosts
- They said he was hit but he did not feel sick
Hypothesized that there are two systems: (slave systems)

- **Visuospatial sketchpad** is when we develop a visual image
- **Phonological loop** is when you find yourself rehearsing partial products
- They compose **working memory**, which is a system for holding information that we need to perform a task
- A **central executive** controls how the slave systems are used
  - Can put information into any of the slave systems or retrieve information from them
  - Can translate information from one system to another
  - Central executive needs its own temporary store of information to make decisions about how to control the slave systems
- Says the phonological loop contains an **articulatory loop**, which functions as an inner voice that rehearses verbal information
  - Remembering a phone number
- Also contains the phonological store, which is an inner ear that hears the inner voices and stores the information in a phonological form
- Articulatory loop contains the word length effect
  - How long it takes to say the word is a major factor
- If we try to keep too many things in working memory, by the time we get back to rehearse the first one, it will have decayed to the point that it takes too long to retrieve and re-rehearse
- Articulatory loop involves voice
- Processing information in the phonological loop is not crucial to getting it into long-term memory

- **Working memory** is tied to the prefrontal cortex
- **Phonological similarity effect**
  - Have to recall letter sequences
  - Either similar sounding or not
  - Either articulatory suppression (1-2-3-4…) or not
  - Dependent variable: # of letters recalled

Factors influencing memory

- **Elaborative processing** involves thinking of information that relates to and expands on the information that needs to be remembered
  - Create an elaborated sentence and it will help you remember the information better
  - “The doctor hated the lawyer…because of the suit.”
  - Elaborations prompt the material to be recalled (experimental elaborations)

- **Self-testing**
  - Better results if you study the material and then test yourself, instead of restudying/rereading it

- **Incidental versus intentional learning**
  - Participants knowledge of the true purpose of the study did not effect their performance
  - Much better recall in the pleasantness rating condition
  - Whether a person intends to learn or not really not doesn’t matter, what matters is how the person processes the material during its presentation