



Word Factors in Word Recognition

- Word frequency
 - Rain versus puddle
 - Differences in spoken versus written
 - A type of practice effect?
- Familiarity
 - Drowsy versus rend
- Age of Acquisition
 - Words learned earlier are named faster; words learned later are prone to loss after TBI
 - Factor in addition to word frequency
- Word length
 - Letters? Syllables? Sounds or how long to say it?




Neighborhood effects

- Neighborhood effects
 - Orthographic versus Phonological
 - N-statistic is measure of density
 - # words created by changing one letter in word
 - Larger neighborhood supports word recognition
 - Rime portion is important
- Grammatical category
 - Nouns better than verbs
- Imageability, meaningfulness, concreteness




Visual Word Recognition Processes

- Reading words is automatic for adult readers – can't help it
 - Automatic versus controlled (attentional) processing
- Priming
 - Automatic priming = body primes heart
 - Spreading activation
 - Attentional priming based on expectancies
 - Will inhibit target if it was unexpected




Varying effects of Factors

- Effects of factors depends on the experimental task
 - Naming versus Lexical Decision or Semantic Decision
 - Reading requires both word recognition and comprehension




Semantic Priming

- Associative
 - Produced in association task, first word that comes to mind for "doctor"...
- Non-associative
 - *Bread* and *cake* are related semantically but not produced in association tasks
- Semantic primes have greater effects when the words are associative
 - Co-ordinate or category primes (pig – horse) did not result in automatic priming unless they were associative
 - Functions or instrument relations (broom – floor) did result in automatic priming




Role of Sentence Context

- Less time for word recognition if the word is expected from the preceding context
 - *She cleaned the dirt from her _____*
- If a word is degraded, then context is facilitating of an expected word, but inhibiting for unexpected word
 - Contextual inhibition is increased for children who have trouble reading independent words
- Context use requires a lot of cognitive resources
 - May only be helpful in difficult circumstances
 - Lexical access is early, automatic, Context processing requires more effort




Summary p. 190

- Differentiate between:
 - associative semantic priming,
 - associative non-semantic priming, and
 - non-associative semantic priming
- Attentional processes can be both facilitating and inhibiting
- How does priming occur?
 - Spread of activation



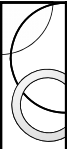
Reading complex words

- Obligatory Decomposition Hypothesis
 - Affix stripping
 - Recognize the base word
- Phonological transparency
 - Friend, friendship, friendly versus sign, signal
- Semantic transparency
 - Unhappiness = un + happy + ness
 - Depart in department and departure
- Knowledge of morphology results in morphological priming



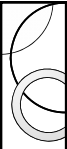
Lexical ambiguity

- Bow or read
- Research suggests all possibilities are activated automatically, unconsciously
- Quick use of context results in rejecting alternatives
 - Context effect is post-access
 - Context does not seem to prevent accessing alternatives
 - Do need to comprehend context to get the correct pronunciation



Reading – Chapter 7

- Dual Route Model (Dual Route Cascaded Model)
 - Lexical versus sublexical routes
 - Skilled readers appear to have selective control



Deep Dyslexia

- Acquired reading impairment for adults with TBI/CVA
- Semantic errors – paralexias
 - DAUGHTER – say “sister”
 - PRAY – say “chapel”
- Symptoms include: semantic errors, visual errors, function word substitutions, difficulty pronouncing nonwords, writing impaired and short-term auditory memory impaired
