

- 1 **The internal lexicon**
 - Dimensions of word knowledge
 - Organization of the internal lexicon
 - Lexical access

- 2 **Dimensions of word knowledge**
 - Phonological knowledge
 - homophones
 - tip-of-the-tongue (TOT)
 - Syntactic knowledge
 - The aging pianist stunned the audience.
 - open class/ content words
 - closed class/ function words
 - agrammatism

- 3 **Morphological knowledge**
 - Free morpheme
 - Bound morpheme
 - inflectional morpheme
 - s (3ps), -ed, -ing, -en, -s (pl), -'s, -er, est
 - derivational morpheme
 - change meaning or parts of speech
 - un-happy: not
 - happi-ness: adjective → noun

- 4 **Semantic knowledge**
 - Sense and reference
 - referents, truth condition, mental model
 - Synonymy
 - coordination
 - hypernymy
 - Hyponymy
 - Meronymy

- 5 **Word association test (p.108)**
 - Taxonomic relations
 - Attributive relations
 - Part-whole relations
 - Functional relations

- 6 **Denotation and connotation**
 - Denotation: objective

- Connotation
spinster—an older woman who is past the society's definition of the standard age for marriage
bachelor—a young man, of eligible age.

7 Organization of the internal lexicon

- Organization of the lexicon influences ease of retrieval.
- The concept of a semantic network
---sense relations in word association tasks
---neurons connected at synapses to other neurons

8 Hierarchical Network Models (p.111)

- How properties were stored in lexicon
(4) Luckily, Aristotle was not blinded by the incident.
(5) Luckily, the rock was not blinded by the incident.
- Cognitive economy
- Information is stored only at the highest possible node.

9 semantic verification task (p.113)

- Intersection search
- Category-size effect: in a statement of the form An A is a B or A has a B, the higher the location of B in the hierarchy in relation to A, the longer the reaction time.
- Similarity reduces verification times for true statements and increases it for false statements.

10

- Typicality effect: items that are more typical of a given subordinate take less time to verify than atypical items in true statement; the opposite is true for false statement.

11 Alternative to the hierarchical concept

- We response slower to *mammal* than to *animal*.
- Attributes are most likely to be stored at more familiar locations in the network.
- Basic-level terms
furniture chair armchair

12 Spreading activation models

- Earlier model Figure 5-2, p115.
- Spreading activation: activation begins at a single node and then spreads in parallel throughout the network.
- Some nodes are more accessible than others. (frequency, typicality)
- Recent model Figure 5-3, p117.
lexeme, lemma, conceptual levels

13 Lexical access

- Models of lexical access
- Variables that influence lexical access

14 **Search models**

Autonomous search model of Forster

- Orthographic and phonetic properties in descending order of frequency
- Single comparator matched the incoming signal to the lexical representation
- The revised model has separate comparators for each file bin.

15 **Logogen model**

- Each word in lexicon is represented as a logogen, which specifies the word's various attributes.
- The logogen is activated by sensory input or contextual information.
- The two routes work in parallel.

16 **Cohort model**

- Account for auditory word recognition
- Recognition point of a word—the point at which the word diverges from other possible words.
- Word initial cohort
- One member is selected for further analysis
- Selected lexical item is integrated into the ongoing semantic and syntactic context

17 **Variables that influence lexical access**

- Word frequency
- Phonological variables
- Syntactic category
- Morphological complexity
- Semantic priming
- Lexical ambiguity

18 **Word frequency**

- Phoneme monitoring
Monitoring times increased slightly after a low-frequency word
- Lexical decision task
- Eye fixations
Low-frequency words were fixated for about 80 milliseconds longer than high-frequency words

19 **Phonological variables**

- Stress
- Intonation patterns

20 **Syntactic category**

- Word frequency effect only holds for open-class words.

21 **Morphological complexity**

- Frequent words are represented as single lexical items in memory.
- Less common words are stored as base plus affixes.

22 **Semantic priming**

- Semantic priming occurs when a word presented earlier activates another, semantically related word.

23 **Lexical ambiguity**

- Phoneme-monitoring
- (16) The man started to drill before the truck arrived.
- Cross-modal lexical decision task (p. 125)
- (17) Rumor had it that, for years, the government building has been plagued with problems. The man was not surprised when he found several spiders, roaches, and other bugs in the corner of this room.
- Even in the presence of a strong biasing context, multiple meanings of ambiguous words are briefly activated.

24 **Lexical ambiguity (2)**

- Frequency
 - Decision times of ambiguity were faster when the sentence required the secondary sense than when it required the primary meanings.
 - Eye movement
 - Fixation times are longer for ambiguous words in which both meanings are fairly equal in strength .
- Context
 - When context biased the dominant meaning, only the dominant meaning was activated.
 - Meaning dominance and prior context jointly influence activation of word meanings

25 **Appraising models of lexical access**

- All of the models provide an explanation for the word frequency effect.
- Each of the models can account for semantic priming.
- Cohort model may be better positioned to explain the full range of factors that influence lexical access.