

1 Sentence comprehension and memory

- Immediate processing of sentences
- Comprehending sentences in context
- Memory of sentences

2 Immediate processing of sentences

- Parsing—assign elements of its surface structure to linguistic categories
- Immediacy principle—make decisions immediately as we encounter a word
- “Wait and see” approach—to postpone interpreting a word or phrase until it is clearer where a sentence is going

3 Parsing strategies

- Late closure strategy—whenever possible, we prefer to attach new items to the current constituent

(5) Tom said that Bill had taken the cleaning out yesterday.

(6) Jessie put the book Kathy was reading in the library...

(7) Since Jay always jogs a mile seems like a very short distance to him.

4 Minimal attachment strategy

- Fewest syntactic nodes
- See Figure 6-2 on p130

5 Modular versus Interactive Models

- Modular approach—comprehension as a whole is a result of many different modules, each devoted to a particular aspect of comprehension. Parsing is performed initially by a syntactic module that is not influenced by higher-order contextual variables.
- Interactive models—syntax and semantics interact during the comprehension process.

6 Constraint-based model

- We simultaneously use all available information in our initial parsing—syntactic, lexical, discourse, and nonlinguistic, contextual information.

7 Examples

- (11) The florist sent the flowers was very pleased.
- (12) The florist sent the flowers to the elderly widow.
- (13) The florist who was sent the flowers was very pleased.
- (14) The performer sent the flowers was very pleased.

8 Findings

- The parser operates with structural biases that are not influenced by prior semantic context. (see ex. 15-18, p. 132.)
- The comprehenders immediately use their lexical knowledge. (see ex. 19-20, p.132)

- Lexical variables influence parsing more rapidly and consistently than discourse variables.

9 **Comprehending sentences in context**

- Can you pass the salt?
- Some marriages are iceboxes.

10 **Maxims of conversations**

1. Quantity
2. Quality
3. Relation
4. Manner

11 **Speech act**

- Locutionary act—the act of saying something
- Illocutionary force—the action that is performed by saying the sentence
- Perlocutionary effect—the effect of the utterance

12 **How do we comprehend indirect speech act?**

- In natural discourse, previous sentences may have activate enough information in semantic memory to comprehend the non-literal meaning directly, without first considering the direct speech act.

13 **Metaphors**

- Billboards are warts on the landscape.
 tenor vehicle

Ground—the implied similarity between tenor and vehicle

14 **Comprehending metaphors**

- When no context preceded the metaphor, metaphoric statements took longer to comprehend than literal statements.
- However, with 45-word contexts, metaphors require no more or less time to understand than literal statements.
- We cannot ignore metaphors, even when metaphoric readings are irrelevant to the task.
- Both literal and figurative priming facilitate metaphor comprehension. (ex 44-46, p141)

15 **Conceptual metaphor theory**

- Lakoff and Johnson have argued that metaphors are not creative expressions but rather instantiations of underlying conceptual metaphors.
- LOVE IS JOURNEY
- Look how far we have come.
- We have hit a dead end.

16 **Class-inclusion theory**

- Glucksberg and his colleagues have advanced a model that states the

metaphors are class-inclusion statements.

- (47) My job is a jail.
- (48) All dogs are animals.
- instantiation
- (49) The container held the apples.
- (50) The container held the cola.

17 Metaphors and “normal” comprehension processes

- We understand metaphors much the way we understand literal speech—by retrieving information from the lexicon, selecting the part that is relevant, and identifying a relationship between the lexical representations that have been retrieved.

18 Memory for sentences

- Memory for meaning vs. surface form
----Ex 53-57, p145
----We ordinary use the syntactic structure of a sentence to extract the underlying meaning.
- Time course of retention
----Retention of both form and meaning was excellent immediately after the study sentence, but memory for form declined substantially within 40 syllables of retention interval (about 12.5 seconds)

19 Pragmatic factors

- Interactional content—convey the attitude of the speaker toward the listener
- Subjects had excellent retention of form as well as meaning of statements that were high in interactional content.
- Students remember polite wording better than impolite wording in an unexpected memory test.
- Also, they were more likely to remember form that were inconsistent with a speaker's status.

20 Inferences and sentence memory

- Greater elaboration of processing leads to better retention.
- Inferences and false recognition errors (See Ex. 58, 59, p.147-8)
- Role of inferences in advertising (p.148)
--People are not good at distinguishing between direct assertions and inferences.
-- Advertisers are prevented, on legal ground from making false statements about their products, but making false implications is less dangerous.