The structure of language

Sound structure:
phonetics and phonology
“cat” = /k/ + /æ/ + /t/
“eat” = /i/ + /t/
“rough” = /r/ + /Ë/ + /f/
Minimal meaning units: morphemes
“cat”, “dog”, “eat”, “go”, “-s”, “-ing”

The structure of language

Words: cat, cats, eat, eating, eats
Sentence structure: syntax
The cat is eating the mouse.
*mouse cat the is the eating. The dog which the cat scratched ran away.
*scratched the which away dog cat the ran.

The structure of language

Discourse structure:
Ok: The cat chased the mouse. Then the cat caught the mouse.
Not good: The cat chased the mouse. The Dow Jones fell 200 points today in heavy trading.

Lecture topics

1. Speech processing: processing phonemes (e.g., /k/ and /g/).
2. Sentence processing: how words are put together into larger structures.
3. Speech processing: Units of sound.
4. Phonemes: The minimal units of sound to distinguish meaning bat vs. pat, cap vs. gap, pat vs. pet vs. pete.
5. International phonetic alphabet: IPA
6. Two frog context: No looks to the incorrect target (the second napkin).

Sentence processing: Summary

• Multiple factors are involved in sentence processing:
– Syntactic structure: keep dependencies close
– Word frequencies
– Plausibility of the resultant structures
– Context