

Lexical semantics

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Section 1

Introduction

What's a bird?



What's a bird?



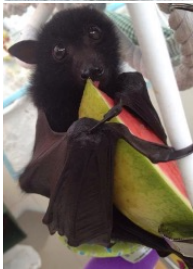
What's a bird?



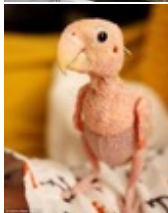
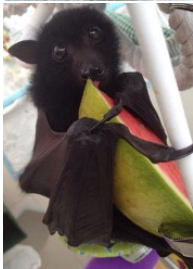
What's a bird?



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What's a bird?



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What's a bird?



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What's a bird?



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What's a bird?



What's a bird?



Are these the same thing?

Are these a “going”, a “moving somewhere”, a GO, a $\sqrt{\text{GO}}$?

go

went

General starting point

Where (in the grammar) does meaning matter?

What's the relevant *level of granularity*?

- ①
 - In what contexts can you use *dog* and in what contexts can you use *cat*?
 - In what contexts can you use *blue* and in what contexts can you use *red*?
- ②
 - In what contexts can you use *go* and in what contexts can you use *went*?
 - In what contexts can you use *assassinate* and in what contexts *give*?

General starting point

- Our intuition tells us that *dog* and *cat* are different things.
 - Nouns/lemmas/lexemes/roots/whatever.
 - We'll go with the **root** $\sqrt{\text{DOG}}$ or $\sqrt{\text{CAT}}$.
- Our intuition also tells us that *go* and *went* are the same thing.
 - Both are derived from the root $\sqrt{\text{GO}}$.
- Make that intuition explicit:
 - How do we know that *dog* and *cat* have different **lexical** content?
 - What does the relevant data look like?

General starting point

- How do we know that *go* and *went* are part of the same verb/lemma/lexeme/root?
- How do we know that *dog* and *cat* are different nouns/lemmas/lexemes/roots?
- More precisely:
 - If you use *go* when you talk about moving events, except if they're in the past, in which case you happen to pronounce the word *went*,
 - Then maybe you use *dog* when you talk about pets, except if it's feline, in which case you happen to pronounce the word *cat*.

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Some tests (Harley 1984)

- Ellipsis: *I have three dogs and you have two ____.*
- Idioms: *The dog is out of the bag, It's raining cats and cats.*
- Paradigms: *go/went, bad/worse/worst* and so on fill in “cells” of a table.

General starting point

- How do we know that *go* and *went* are part of the same verb/lemma/lexeme/root?
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General starting point

- ❶ Different kinds of meaning in grammar:
 - Morphosyntactic (“grammatical”) meanings: tense, number, etc.
 - Lexical (“conceptual”) meanings: kinds of birds, kinds of animals, etc.
 - ❷ These different meanings matter for different things (“granularity”).
 - ❸ So there’s a grammatical upshot:
 - We need to have theories of ellipsis, idioms, morphology, etc.
 - We need to have theories of what nouns are, etc.
 - We need to have theories of functions and arguments (e.g. verbs).
 - ❹ It isn’t trivial to figure out which meanings types are out there and what they influence in the grammar.
- This is the task of lexical semanticists.
 - Psychologists and philosophers also worry about some related topics, like whether we decide what a bird is by comparing to a prototype or assembling features (Rosch 1978).
 - What phenomena in lexical semantics are you already familiar with?

What's lexical semantics?



What's lexical semantics?

- Mass/count
- Telic/atelic
- Concrete/abstract
- ...

We'll focus on the connection to *argument structure*.

Core transitives

Let's start with some *core/non-core transitives*.

- (1) a. Kirby grew tomatoes.
b. The tomatoes grew / Kirby caused the tomatoes to grow.
c. *Kirby's growth of tomatoes.
 - (2) a. Kirby destroyed the lego tower.
b. *The lego tower destroyed / Kirby caused the tower to destroy.
c. Kirby's destruction of the lego tower.
- What's going on? Why? How do we encode it? What might it affect? (e.g. agreement, adverbs, argument/event structure, phonology)
 - More examples? In more languages?

Some difficult questions

- ① What are the most robust crosslinguistic generalizations regarding the interaction between lexicon and grammar?
- ② What formal tools can account for these?
- ③ Is it possible to reach a constrained inventory of lexical primitives?
- ④ How can these claims be tested experimentally and modeled computationally?

Levels of granularity

When would it matter whether we're talking about:

- Golden retrievers or pugs
- Dogs or cats
- Pets or farm animals
- Animals or people
- Animate or inanimate beings
- Something that can be the object of *assassinate* or not
- Something that can be the object of a verb or not
- Something that's a noun or not

Section 2

References

- Harley, Heidi. 2014. “On the Identity of Roots.” *Theoretical Linguistics* 40 (3/4): 225–76.
- Rosch, Eleanor. 1978. “Principles of Categorization.” In *Cognition and Categorization*, edited by Eleanor Rosch and Barbara B. Lloyd, 27–48. Hillsdale, NJ: Lawrence Erlbaum.