

# Meaning in Natural Language

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## Some Definitions

- Word meaning, sometimes called **lexical** meaning, are the basic building blocks of natural language (NL) meaning. We'll largely leave these as unanalyzed primitives.
- Sentence meaning has long been assumed to be **compositional**: the meanings of a sequence of words is based on the meanings of its component parts and the way they are combined.

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- Sentence meaning has long been assumed to be **compositional**: the meanings of a sequence of words is based on the meanings of its component parts and the way they are combined.
- An **utterance** is an instance of a sentence used in a context. Some aspects of utterance meaning go beyond compositional, sentence-level meaning. Where a sentence is a decontextualized abstraction, an utterance depends on the place and time it occurs, the speaker and audience, and other factors.

# Form

- The form of a sentence (of, say, English) is in some sense independent of its meaning. A well known example of this is due to Chomsky:

- (1) a. Colorless green ideas sleep furiously.  
b. Furiously sleep ideas green colorless.

Although (1a) means something odd, there's clearly something wrong with (1b) that's not wrong with (1a). The sentence in (1a) is **syntactically well formed** or **grammatical**, while (1b) is not. A sentence's form is sometimes referred to as its **syntax**.

# Meaning I

- The meaning or interpretation of a sentence is usually discussed using an abstract notion called a **proposition**, a discrete chunk of meaning which can be either true or false. If a sentence  $S$  means or is interpreted via the proposition  $P$ , we say that  $S$  **denotes** or **expresses**  $P$ , or equivalently,  $P$  is the **semantics** of  $S$ .

## Meaning II

- A proposition can be expressed by a given NL sentence, but is usually taken to exist separately from the sentence that expresses it. Some examples of this:
  - (2) a. Clint Bunsen is married to a woman with red hair.
  - b. Clint Bunsen's wife is a redhead.
  - c. A redhead is Clint Bunsen's wife.
  - d. L'épouse de Clint Bunsen est une rousse.

Notice that all of the sentences in (2) express the same proposition, that is, they are distinct with respect to their form but equivalent with respect to what they mean.

# Exercises I

The following two English sentences are used as data for Exercises 1 and 2:

- (3) a. The only bar in Lake Wobegon is The Sidetrack Tap.  
b. The Sidetrack Tap is the only bar in Lake Wobegon.

## Exercise 1

Are the sentences in (3) distinct from each other?

## Exercise 2

Do the sentences in (3) express different propositions?

## Exercises II

### Exercise 3

Perform the following:

- 1 Say the sentence *Pastor Ingqvist likes to eat Powdermilk Biscuits.*
- 2 Repeat 1, then stop.

How many utterances occurred while you were performing these steps?

### Exercise 4

Write down four distinct<sup>a</sup> sentences that express the same proposition.

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<sup>a</sup>Distinct in the sense of being distinct from one another and also distinct from the sentences in this handout!

## Exercises III

### Exercise 5

Give an example of an English sentence that expresses more than one distinct proposition.