

# SEMANTICS

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# Semantics

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- Semantics is the study of meaning in language, including
  1. The meaning of individual words (lexical semantics)
  2. The meaning of larger units like sentences
- Semantics has long attracted the interest of philosophers and logicians, going back (at least) to Plato and Aristotle
- Today, semantics is studied by linguists, psychologists, philosophers, and others, under many different theories, e.g.
  - Cognitive linguistics: meaning rooted in the mind & body
  - Formal (logical) semantics: meaning as truth conditions
  - Semiotics: meaning as an abstract system of signs
- In this lecture we will explore just a handful of fundamental issues in the analysis of linguistic meaning

# Two views on word meaning

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## 1. **Meaning as reference:** words $\Rightarrow$ things

- In this view, words 'name' or 'refer to' things in the world
- This seems true of proper nouns like *London* and *Bill Clinton*, and perhaps even nouns like *chair*
- However, what 'things' do verbs and adjectives refer to? Or even nouns like *consistency* and *tradition*?

## 2. **Conceptualism:** words $\Rightarrow$ **concepts** $\Rightarrow$ things

- In this view, the connection between words and things in the world is mediated by our minds
- Words like *near*, *alive*, and *rabbit* refer to mental concepts of 'nearness,' 'aliveness,' and 'rabbithood'
- Some concepts may even be innate to the human mind
- This view seems more reasonable, but still leaves us with the difficulty of identifying 'concepts'

## Meaning as reference leads to a paradox

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- The ancient Greeks identified the stars Hesperus (the first star to appear in the evening) and Phosphorus (the last star to disappear in the morning)
- Later, Pythagoras discovered that Hesperus and Phosphorus are really the same star (in fact, they are the planet Venus):
  - (1) *Hesperus is Phosphorus*
- But since both Hesperus and Phosphorus refer to the same thing, this is equivalent to saying
  - (2) *Hesperus is Hesperus*
- Why then is (1) informative, while (2) is not?

## Two kinds of meaning: *sense* and *reference*

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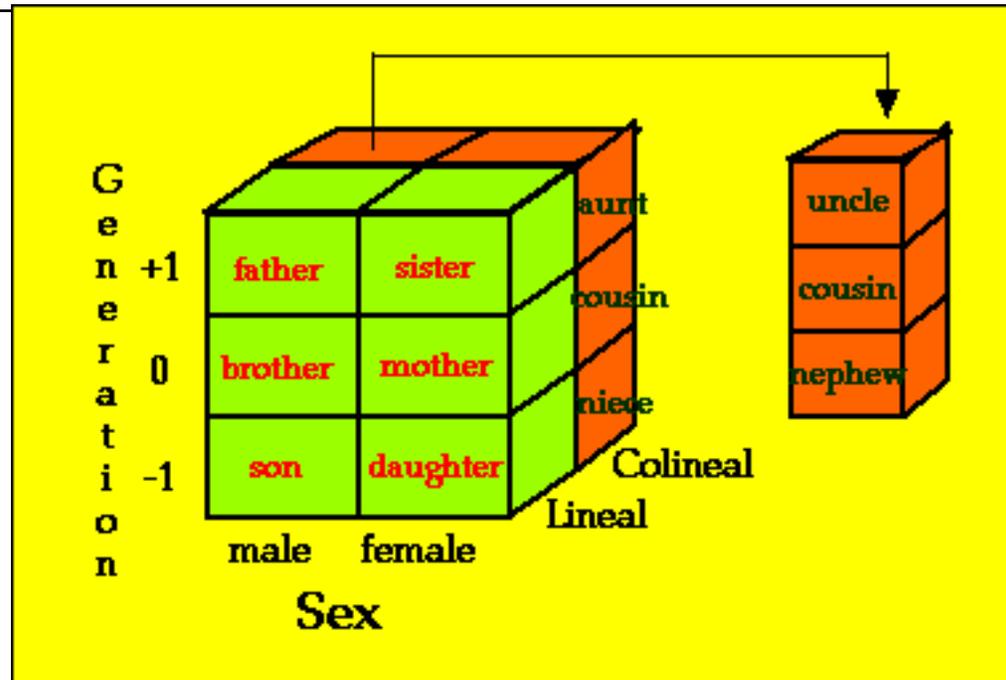
- A solution to this identity paradox was proposed by German logician Gottlob Frege (1848-1925)
- Frege distinguished a word's *reference*—what it refers to in the world—from its *sense*, or cognitive content

*Reference* relates words to entities in the world

*Sense* relates words to each other within the language

- The sense of Hesperus is 'the evening star' and the sense of Phosphorus is 'the morning star', even though they happen to share the same reference (Venus)
- Sense is what you grasp when you understand a word
  - Sense of *chair* is 'seat with four legs and a back'
  - Sense of *aunt* is 'parent's sister'

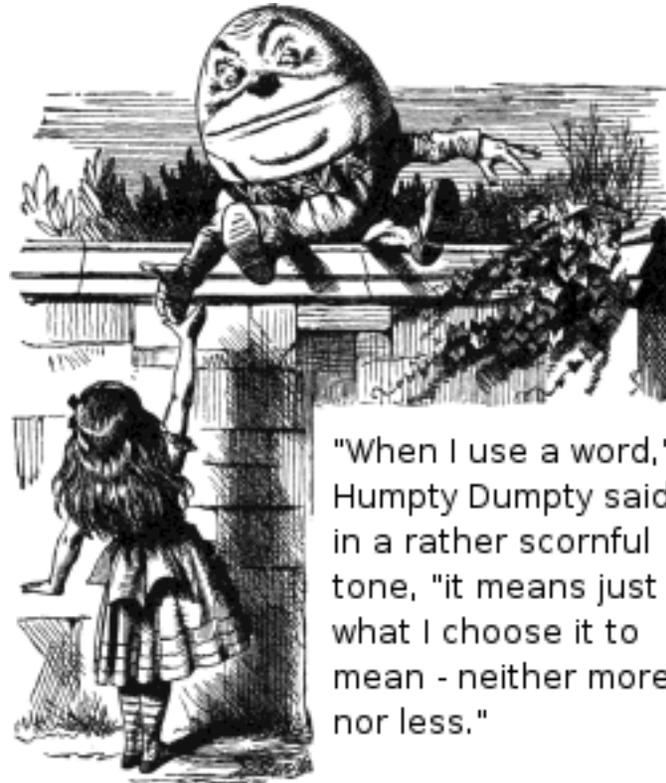
# Senses of kinship terms



- Kinship terms like *aunt* and *cousin* have language-specific senses that do not correspond to categories in nature
- For example, Pitjanjatjara carves up kinship differently than English: *ngunytju* 'mother's sister,' *kamuru* 'mother's brother,' *kurntili* 'father's sister,' *mama* 'father's brother'

# How do words acquire meaning?

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- According to Humpty Dumpty, the meaning of a word is purely *idiosyncratic* (up to the individual)
- If Humpty were right, communication would be impossible!

# Naturalism vs. conventionalism

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- The earliest recorded linguistic discussion is Plato's *Cratylus*, c. 400 BC, which recounts a debate between Cratylus and Hermogenes about how words acquire meaning
- Hermogenes advocates the *conventionalist* position that language originated as a product of convention, so that the relationship of words and concepts is *arbitrary*

‘Nothing has its name by nature; only by usage and custom’
- Cratylus advocates the *naturalist* position that there is a natural, intrinsic relationship between words and concepts

‘There is a correctness of name existing by nature for everything: a name is not simply that which a number of people jointly agree to call a thing’

# Word meaning is arbitrary and conventional

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- Today it seems obvious that Cratylus was wrong and Hermogenes was right—the relation between words and concepts is *arbitrary* (not natural) and *conventional* (based on usage and custom)
- There is nothing about the word *dog* (or *perro*, *chien*, *inu*, *cão*, or *Hund*) that bears any natural relationship to ‘dogness’
- There are two exceptions to this arbitrariness:
  1. Onomatopoeia like *meow* and *splash*
  2. Interjections like *ouch!*

But notice that these also vary greatly across languages

# Deixis

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- Words which can be interpreted only with reference to the speaker's position in space or time are called *deictic* forms
- There are three types of deixis
  1. Personal deixis: *I, you, he, etc.*
  2. Spatial deixis: *this/that, here/there, bring/take, come/go*
  3. Temporal deixis: *now, yesterday, then, etc.*
- Every language has a deictic system (though details can vary)
- Spatial deixis is speaker-centered in English and Spanish
  - este* 'near me', *ese* 'away from me', *aquel* 'far from me'
- Japanese and Fijian take the hearer into account too
  - ongo* 'near me', *ongori* 'near you', *oya* 'away from us'

# Collocations and idioms

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- A *collocation* is a group of two or more words that habitually co-occur: *blond* and *hair*, *flock* and *sheep*, *salt* and *pepper*, *weapons of mass destruction*
- The term was coined in the 1930s by British linguist J.R. Firth: 'You shall know a word by the company it keeps'
- Collocations differ across languages: in English we 'face' problems and 'interpret' dreams, while in Hebrew we 'stand in front of' problems and 'solve' dreams
- A collocation with a fixed, single meaning is called an *idiom*
- Examples of English idioms: *kick the bucket*, *blow one's top*, *spill the beans*, *rain cats and dogs*, *let one's hair down*

## Six aspects of utterance meaning

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1. **Grammatical** meaning: semantic roles like agent, patient, goal, etc., determine who did what to whom in a sentence
2. **Prosodic** meaning is conveyed by stress and intonation patterns in utterances like *Oh, that's just great!*
3. **Affective** meaning is the emotional connotation attached to utterances like *hurray!* and words like *vagrant* vs. *homeless*
4. **Pragmatic** meaning refers to how an utterance functions in context: *Can you pass the salt? It's freezing in here!*
5. **Social** meaning can be conveyed by register and dialect, as in *Good morning, sir* vs. *wuzzup!*
6. **Propositional** meaning is expressed by logical *propositions* (statements that are true or false) like *It's raining in Ottawa*

# Truth-conditional semantics

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- *Truth-conditional semantics* is an approach that emphasizes the role of *truth* within and between sentences
- Motto: to understand a sentence is to know the conditions under which it would be true
- Some propositions are *empirically* true or false—you decide by checking the real world

*It's raining in Ottawa*

*Arnold Schwarzenegger is governor of California*

- Other propositions are *analytically* true or false: their truth depends on the semantics of the language, not the real world

*Either it is raining in Ottawa or it isn't*

*If John killed the bear then it's dead*

# Entailment and presupposition

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- *Entailment* and *presupposition* are examples of truth relations between sentences

- *A* entails *B* when the truth of *A* guarantees the truth of *B* and the falsity of *B* guarantees the falsity of *A*

*John and Mary are sick* entails *John is sick*

*The car is red* entails *The car has a color*

*Oswald assassinated Kennedy* entails *Kennedy is dead*

- *A* presupposes *B* when the truth of *B* is required to make *A* a felicitous utterance

*The present king of France is bald* presupposes *there is a present king of France*

*It wasn't Bill who lied* presupposes *someone lied*

# Semantics: important concepts

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- The mapping of sounds to concepts is fundamentally *arbitrary* and *conventional*, not natural
- Two types of word meaning must be distinguished
  1. *Reference* relates words to entities in the world
  2. *Sense* relates words to each other within the language
- *Deictic* forms like *you*, *there*, and *today* are interpreted relative to the speaker's position in space or time
- Co-occurring word patterns include *collocations* and *idioms*
- Aspects of utterance meaning: grammatical, prosodic, affective, pragmatic, social, propositional
- *Entailment* and *presupposition* are examples of truth relations that hold between sentences