

# INTERDISCIPLINARY APPROACHES TO LANGUAGE AND ITS USE

## Semantic meaning

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# WHAT IS SEMANTIC MEANING?

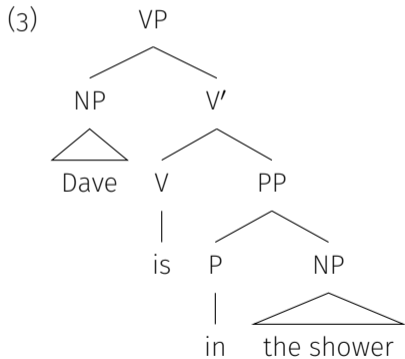
Prototypical properties of semantic meaning:

- derivable largely from form
  - phonology and morphology → lexical meaning
  - syntax → compositional meaning
- literal and conventional
- independent of the properties of the utterance situation
- independent of speaker's beliefs, goals, intentions, ...

# FORM

(1) Dave is in the shower.

(2) [deɪv ɪz ɪn ð ʃaʊə]



WRITTEN FORM

PHONETICS/PHONOLOGY

MORPHOSYNTAX

## DERIVATION OF SEMANTIC MEANING FROM FORM

(4) Dave is in the shower.

- (5) a. *Dave*  $\rightsquigarrow$  DAVE LEXICAL MEANING  
refers to the individual called Dave
- b. *shower*  $\rightsquigarrow$   $\{x : \text{SHOWER}(x)\}$  LEXICAL MEANING  
characterizes the set of showers
- c. *the shower*  $\rightsquigarrow$  THE  $x : \text{SHOWER}(x)$  SEMANTIC COMPOSITION  
refers to the single shower ( $\rightarrow$  **pragmatics!**)
- d. *in*  $\rightsquigarrow$   $\{\langle a, b \rangle : \text{IN}(a, b)\}$  LEXICAL MEANING  
characterizes the relation between two entities  $a, b$  such that  $a$  is located in  $b$
- e. *(is) in the shower*  $\rightsquigarrow$   $\{y : \text{IN}(y, \text{THE } x : \text{SHOWER}(x))\}$  SEMANTIC COMPOSITION  
characterizes the set of entities located in the shower
- f. *Dave is in the shower* = TRUE if  $\text{IN}(\text{Dave}, \text{THE } x : \text{SHOWER}(x))$  SEMANTIC COMPOSITION  
Dave is a member of the set of entities located in the shower

# UNDERSPECIFICATION AND PRAGMATIC ENRICHMENT

Semantic meaning is rather underspecified

- (6) Dave is in the shower.  
is true if (and only if) Dave is located in the shower

In real-life situations it is accompanied by various other pragmatic inferences (“pragmatic enrichment”):

- Dave is located in the small room where one takes a shower.
- Dave is not located in the device for spraying water.
- Dave is taking a shower.

Semantic meaning cannot be negated without contradiction. Pragmatic meaning can:

- (7) Dave is in the shower, ...
- ✗ but he's in the bedroom.
  - ✓ but he's not taking a shower, he's repairing it.

# NOTIONS OF SEMANTIC MEANING

- reference and quantification
  - *a/the student, at least five students*
- properties and relations
  - expressed by nouns, adjectives, intransitive verbs (→ properties)
  - or by transitive verbs, prepositions (→ relations)
- lexical/phrasal vs. compositional meaning
  - *in, shower vs. in the shower*
- truth and falsity; truth-conditions
  - truth relative to a simplified model of the world, not reality

## **READING AND WATCHING TIPS**

Portner, Paul. 2005. *What is meaning? Fundamentals of formal semantics*. Oxford: Blackwell.

Coppock, Liz & Lucas Champollion. 2020. *Invitation to formal semantics*. Manuscript, Boston University and New York University.  
<http://eecoppock.info/semantics-boot-camp.pdf>

Elbourne, Paul. 2011. *Meaning: A slim guide to semantics*. Oxford: Oxford University Press.

YouTube videos on Semantics:

- The Ling Space on sentential logic:  
<https://www.youtube.com/watch?v=lw4ykgRtv3Q&t=45s>
- The Ling Space on predicate logic:  
<https://www.youtube.com/watch?v=al5SJSblyvM&t=0s>
- The Ling Space on set theory:  
<https://www.youtube.com/watch?v=M96aiDk2ePw&t=7s>

# REFERENCES

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- Coppock, Elizabeth & Lucas Champollion. 2020. Invitation to formal semantics. Manuscript, Boston University and New York University.  
<http://eecoppock.info/semantics-boot-camp.pdf>.
- Elbourne, Paul D. 2011. *Meaning: A slim guide to semantics*. Oxford: Oxford University Press.
- Portner, Paul. 2005. *What is meaning? Fundamentals of formal semantics*. Oxford: Blackwell.