

Big Picture

Semantics – how do we figure out the situations in which sentences are true or false?

Compositionality = pieces + composing them

- **Lexical semantics** = what do we know about word meanings?
- **Compositional semantics** = how do we put the pieces together?

Compositional semantics

So far:

- **Sentence-meaning**
- truth, truth-conditions, possible worlds
- **Meaning of DPs** (noun phrases)
- constant/variable reference, naming game
- **Meaning of predicates**
(verbs, nouns, adjectives)
- set theory, relations, functions
- **Putting things together**
- lambdas, types

Compositional semantics: DPs

From now on: *More about DPs & predicates*
Keep comparing theory & data!

- **DPs that don't refer to objects**
sets of sets, patterns of meaning: polarity
- **Different types of DPs, & what they do**
definite, indefinite, quantificational
- **A unified theory**
kinds, objects, mass, count,
different languages

Compositional semantics: putting it all together

- **Events and times**
tense, and perhaps aspect
- **Passives and impersonals**
what exactly do you say when you don't
say who did it?
what do impersonal pronouns mean?

To motivate further theory

Either John is in that room or Mary is, and possibly they both are.

- Andrew, Will: John?
- Abigail, Ted: how many “clauses”?
- Daniel, Maxine: room?

Stuff we need: “that” (to make “that room”)
representing “either...or”
“possibly”

When it rains, it pours

- Sonja, Sandhya: representing situations?

Sam wants a dog, but Alice wants cats

A dog is a quadruped

- Gideon, Elizabeth: dog, cats?

Stuff we need: quantifying over situations/worlds

plural vs singular phrases

what to do with bare plurals?

Is ‘a dog’ ambiguous?

“but” vs. “and”

representing generic meanings

New kind of ambiguity?

Scope ambiguity

Lexical or structural?

- Sam wants a dog
- Everything is black or white
- Someone loves everyone

Semantic theory so far:

- Sentence = predicate saturated with all its arguments (so, smth True or False)
- Sentences can be composed from other sentences using “no”, “and”, “or”, “if-then”
- Predicates can have valency of zero (to rain), one (to run), two (to devour), three (to give) etc. arguments.
- Arguments can be of any type, including entities, other predicates, and whole sentences

Semantic theory so far (cont'd):

- DPs can represent entities (John), predicates (“a dog” in “Fido is a dog”), or expressions with quantifiers (“a dog” in “Sam wants a dog”)
- We can make new predicate expressions using lambdas; also new semantic rules.