WiSe 2016/17 Semantics 1

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A Semantic Model

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Homework

Find or construct one example for each type of ambiguity
- lexical amb.
- structural ambiguity
- referential ambiguity
- collective/distributive ambiguity
- scope ambiguity

(bus stop Bremer Straße, Frankfurt a.M., Oct. 2016, M.Sailer)

Your examples:

She was talking Turkey/turkey
R1: She is talking about Turkey(?)

R2: She is talking frankly.

Lexical ambiguity of the word T/turkey

The Panda eats shoots and leaves.
R1: The Panda eats, shoots, and leaves.

R2: The Panda eats [shoots and leaves].

R3: The Panda [[eats shoots] and leaves]
structural ambiguity: coordination of 3 verbs or coordination of 2 nouns, coorination of "eats shoots" and "leaves"

lexical amb.: shoots, leaves

She knew she was in danger.

R1: She_1 knew she_1 (hersefl) was in danger.

R2: She_1 knew she_2 [someone else] was in danger.

referential amb.

Two firemen estinguished a fire.

R1: Two firemen together estinguished a fire.

R2: Each of the firemen estinguishes a fire on his own.

collective/distributive amb.

A woman is maternal by nature.

R1: A woman in general (i.e. each woman) is maternal.

R2: A particular woman is maternal ...

lexical amb./referential amb.:

"a" talks about a generic individual (individuals of a particular kind) (R1)

"a" talks about an arbitrary individual (R2)

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scope ambiguity

Every student did not pass the exam.

R1: Every student failed the exam. [preferred reading in German]

R2: Not every student passed the exam (i.e. some failed). [preferred reading in English]

Every American voted for a candidate.

R1: Every American voted for the same candidate.

R2: Every American voted for some candidate, but not necessarily the same.

English history teacher

R1: teacher of Engl. history: [[Engl. history] teacher]

R2: an English teacher of history [English [history teacher]]

 structural amb.

[What you wrote] is not clear to me.

R1: Free relative clause: The thing that you wrote is not clear to me.

R2: embedded interrogative: It is not clear to me what you wrote.

structural amb.

Michal Jordan is a big player.

R1: MJ is a tall player.

R2: MJ is a good player

lexical ambiguity

Spanish:

MJ es un jugador grande.

MJ es un gran jugador.

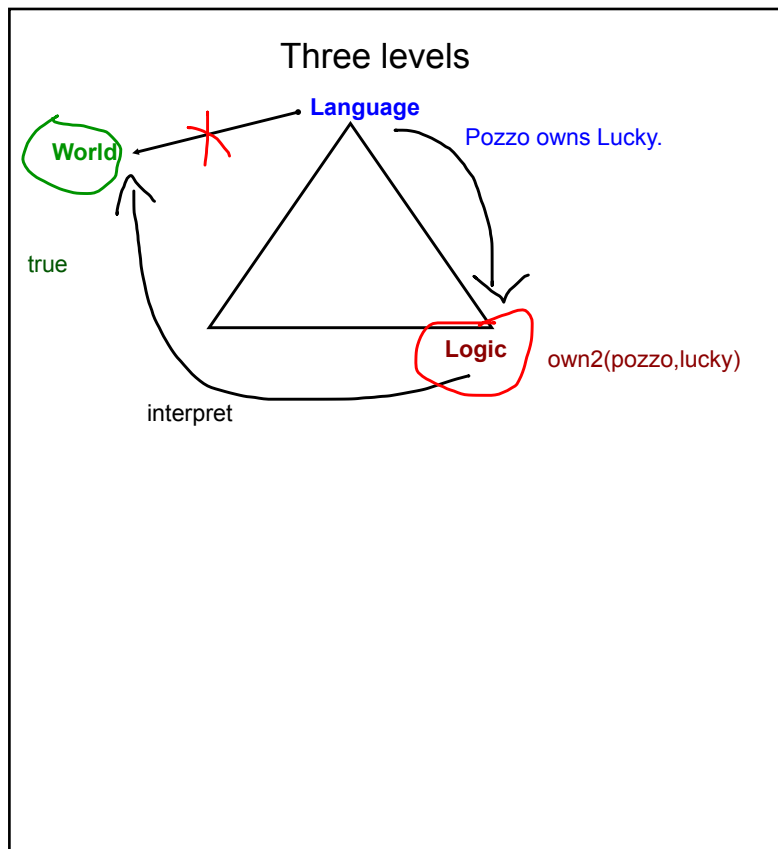## Waiting for Godot

Characters:

Vladimir

Estragon

Pozzo

Lucky

A boy

(Godot)

What do we need in our model?

- individuals, objects, ...
- relations
- properties

Three levels

Language

World

Pozzo owns Lucky.

true

Logic

own2(pozzo,lucky)

interpret

Language and Logic

1 expression, 2 formulae:

   suit (lexically ambiguous)

2 expressions, 1 formula:

   sofa - couch (synonyms)

1 structure, 2 readings: scope amb., collective/distri. amb, referential amb.

2 structures but the same meaning:

Lucky gave the basket to Pozzo.
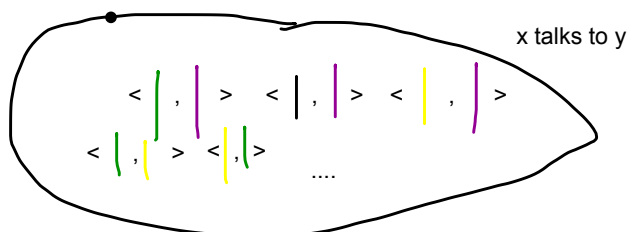
Lucky gave Pozzo the basket.
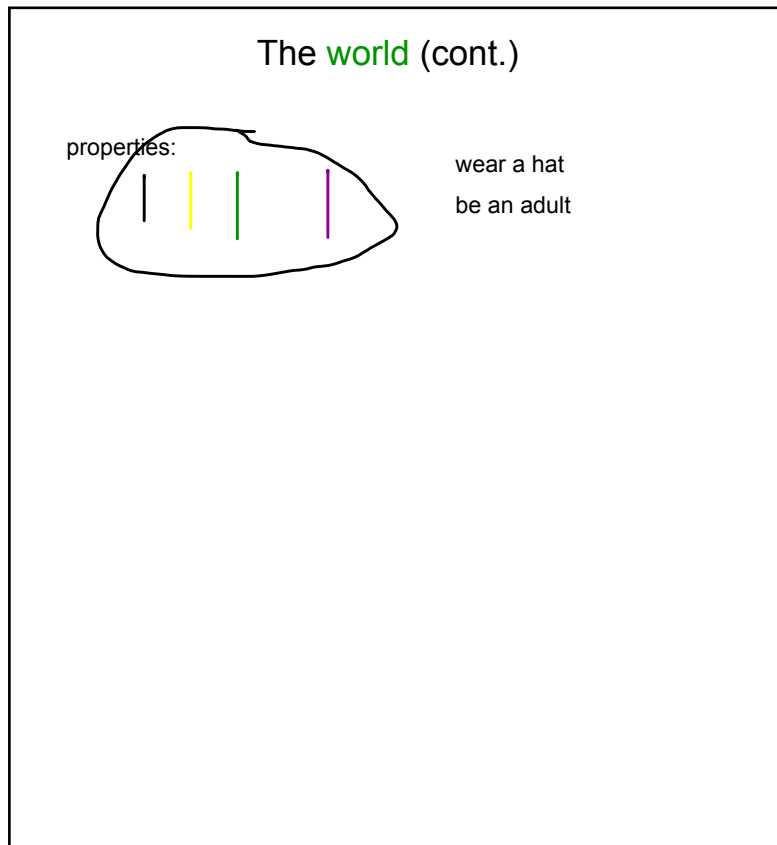
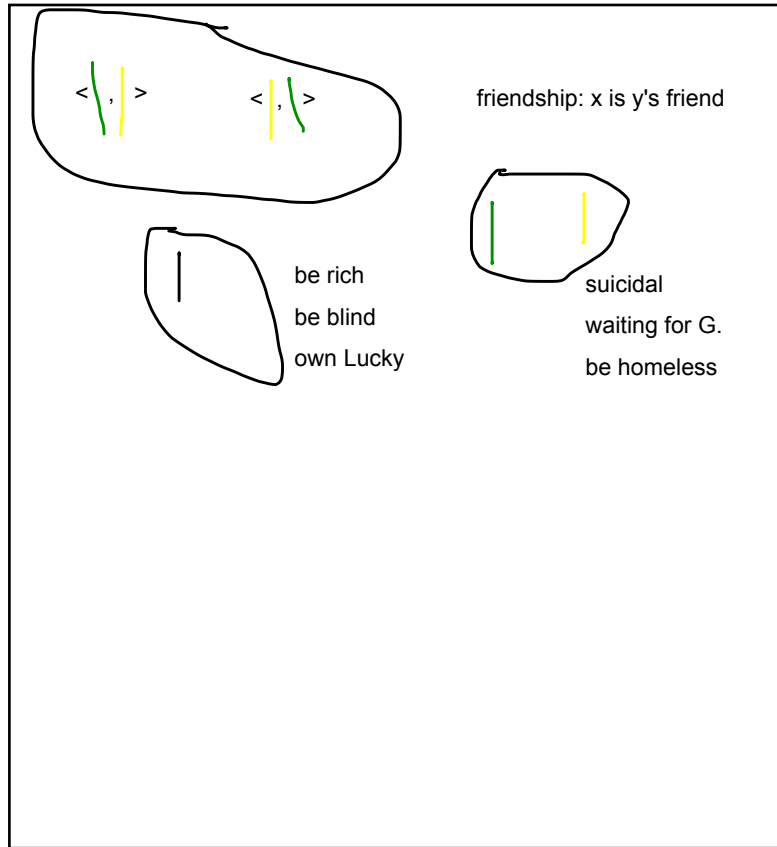The basket was given to Pozzo by Lucky.

The world

individuals: vl, pozzo, lucky, estra, the boy

properties:

relations: < | , | >   { < x, y > | (such that) x owns y }

the second element in the pair belongs to the first element in the pair

x talks to y

< | , | >   < | , | >   < | , | >

< | , | > < | , | >   ....

< \ , | >   < | , \ >   friendship: x is y's friend

be rich   suicidal

be blind   waiting for G.

own Lucky   be homeless

The world (cont.)

properties:

wear a hat

be an adult

The world (cont.)

truth values: true/ false   1/0

Logic

names: vladimir estragon pozzo lucky

predicate symbols: be-homeless1

                         own2

            be-friends2

formulae: be-homeless1(estragon)

        own2(pozzo,lucky)

  be-homeless1(pozzo)

Language

Proper names: Vladimir, Estragon, ...

nouns, verbs, adjectives:

   homeless   land-owner

sentences: Pozzo owns Lucky.

Language	Logic	World
proper noun	name symbol	individual
VP, common noun, adjective, ...	predicate symbol	relation/property
sentence	formula predicate symbol+right number of name symbos	truth values (proposition)

For next week

- Our literary scenario: see the links in the wiki:
  https://www.lexical-resource-semantics.de/wiki/index.php/
  Semantics_1,_WiSe_2016/17_(Sailer)
- Towards a formal model:
  - > Watch the video and work on the questions of the wiki section
    for week 3
  - > Read Levine et al. (in prep.), Chapter 2, Section 1 [available on
    olat].
- Create your own model. Use:
  - > three characters from our scenario
  - > define two 2-place relations
  - > define two properties
- Make one true statement and two false statements that can be
  checked with respect to your model.