

1 Semantic Relations

The Edinburgh Associative Thesaurus (<http://www.eat.rl.ac.uk/>) consists of lexical association data: Subjects were presented trigger words and were asked to enumerate a list of words, which they spontaneously associate with the trigger.

Here is a small selection of triggers and associations:

sleep: bed, dream, awake, death, sound

bicycle: wheel, ride, bike, moped, pump

float: water, boat, log, swim, sink

strawberry: fruit, cream, summer, pie, sweet

- (a) The relation holding between the triggers and the single associated terms can be one of the WordNet relations, it can be a thematic role or frame relation, or something different from the two. Which associations are candidates for WN, FN, or “neither”?
- (b) Use the WN web interface (<http://wordnetweb.princeton.edu/perl/webwn>) to find out how the candidates for WN-relatedness are actually connected in the WordNet database.
- (c) Do the same for the thematic role/ frame candidates. Go to <http://framenet.icsi.berkeley.edu/>, use the lexical unit search which gives you the alternative frames corresponding to different readings, pick out the reading which you think is appropriate, click at the attached frame link. You typically will not find the role filler explicitly noted in the frame description. Look through the frame inventory and the annotated examples to get an idea which role/ frame element might be the one which best describes the role relation in your association pair.
- (d) Describe the kind of semantic relatedness informally in those cases where the relation is neither covered by WordNet nor by thematic roles.

2 Davidsonian Event Semantics

Sentence (1) is syntactically and therefore also semantically ambiguous (modifier attachment ambiguity):

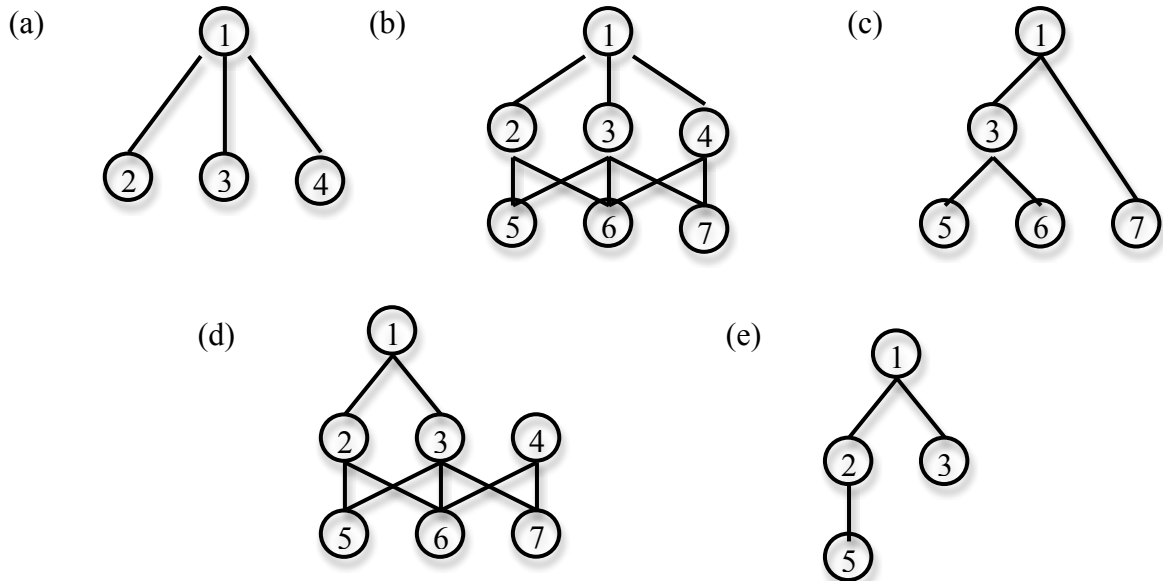
(1) *John saw a man with a telescope*

- (a) Give semantic representations of the two readings of sentence (i) in Davidson’s event semantics, (ii) in “Neo-Davidsonian” style. “experiencer” and “object” are the role names usually used for the arguments of the verb see. Do not care about tense.

- (b) Provide a (neo-) Davidsonian analysis also for sentence (2). Hint: Mary did not see persons, but an event.
 (2) *Mary saw the children play in the street.*

3 Semi-lattices

Which of the following structures are semi-lattices, which are not? Please, explain negative answers.



4 Plurals and Collectives

- (a) “give a talk” is a mixed predicate (neither strictly distributive nor strictly collective. How many talk events can be alternatively involved in the different situations described by the possible readings of Sentence (2)? Explain, and illustrate with the j-b-m semi-lattice.
 (3) *John, Bill, and Mary gave a seminar talk.*
- (b) What are the readings of sentence (4), how many commenting events and how many papers may be involved in the situations described by the respective readings? Hint: The correct answer to (b) is not a trivial variant of the answer to (a). Think of quantifier scope!
 (4) *John, Bill, and Mary commented a paper.*

5 Mass Terms

Give appropriate logical representations of the following sentences:

- (1) *The ring is new, but the gold in the ring is not new.*
 (2) *Part of the rings consists of gold*
 (3) *The rings consist in some part of gold and in some part of silver.*

To be turned in by Thursday, 2009-06-04