

## Hausaufgabe 10 (revised)

### EXERCISE 1

Consider the sentence (1). It conveys the propositions expressed in (1a), (1b) and (1c). But are these propositions entailed or presupposed by sentence (1)? Classify them as entailed or presupposed by judging how they behave in the negation test, the conditional test, the question test, under **perhaps**, and in imperatives.

- (1) Whoever discovered the elliptic form of planetary orbits died in misery.
  - a. Someone discovered the elliptic form of planetary orbits.
  - b. Planetary orbits are elliptical.
  - c. Someone died in misery.
- (2) Whoever discovered the elliptic form of planetary orbits did not die in misery.
- (3) If whoever discovered the elliptic form of planetary orbits died in misery, he should have kept his mouth shut.
- (4) Did whoever discovered the elliptic form of planetary orbits die in misery?
- (5) Perhaps whoever discovered the elliptic form of planetary orbits died in misery.
- (6) Ensure that whoever discovered the elliptic form of planetary orbits dies in misery!

### EXERCISE 2

Recall the sentences (7)-(8), with a presupposition trigger in the second disjunct of an *either...or* construction:

- (7) Either John does not have a donkey or John's donkey is eating quietly in the stable.  
 ⇒ Does NOT imply that John has a donkey.  
 That is, the presupposition accommodation.
 

|             |
|-------------|
| x           |
| donkey(x)   |
| of(x, john) |

 is not resolved as global
- (8) Either John has run out of hay or John's donkey is eating quietly in the stable.  
 ⇒ Does imply that John has a donkey.  
 That is, the presupposition accommodation.
 

|             |
|-------------|
| x           |
| donkey(x)   |
| of(x, john) |

 is resolved as global

The goal of this exercise is to see how one arrives at the correct result (no global accommodation in (7), global accommodation in (8)) following van der Sandt's resolution algorithm. For the sake of this exercise, resolve the presuppositions following the steps in (9). Accessibility and sub-/super-ordination are defined in (10)-(12). The acceptability constraints are repeated in (13).

(9) van der Sandt's procedure:

1. Build the preliminary DRS with all the presupposition marked with  $\alpha$ . (You can do this directly, no need to combine the units step by step via  $\beta$ -reduction.)
- [2. ...] Irrelevant, since there is no previous discourse.
3. Traverse the DRS, and on encountering an  $\alpha$ -DRS try the following steps in the order indicated, dismissing the result of a given step if it violates **acceptability** constraints.
  - 3.1. Try to bind the presupposed information to an **accessible** antecedent.
  - 3.2. If that doesn't work, try to accommodate the information to a **superordinated** level of DRS.
    - 3.2.1. Try first global accommodation.
    - 3.2.2. If it doesn't work, try intermediate accommodation.
    - 3.2.3. If it doesn't work, try local accommodation.

(10) A DRS  $B_1$  is accessible from DRS  $B_2$  when  $B_1$  equals  $B_2$ , or when  $B_1$  subordinates  $B_2$

(11) A DRS  $B_1$  subordinates  $B_2$  iff:

- $B_1$  immediately subordinates  $B_2$ , or
- There is a DRS  $B$  such that  $B_1$  subordinates  $B$  and  $B$  subordinates  $B_2$

(12)  $B_1$  immediately subordinates  $B_2$  iff:

- $B_1$  contains a condition  $\neg B_2$
- $B_1$  contains a condition  $B_2 \Rightarrow B$
- $B_1 \Rightarrow B_2$  is a condition in some DRS  $B$

- $B_1$  contains a condition  $B_2 \vee B$
  - $B_1 \vee B_2$  is a condition in some DRS  $B$



Modified from original B&B slides.  
See van der Sandt p. 356.

(13) Acceptability constraints:

- a. DRSs should obey the binding rules (accessibility and superordination).
- b. DRSs should not contain free variables.
- c. DRSs should be consistent and informative.
- d. DRSs should also be *locally* consistent and *locally* informative.  
That is: the resolved DRS should not contain a subordinate DRS  $K$  whose falsity or truth is entailed by a DRS superordinate to it. (MR, from v.d.Sandt p. 367)

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