

Assignment sheet 2: Lexical Resource Semantics

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General rules

- Requirements depending on your study program:

L2/L5:	pass assignment sheets	(Leistungsnachweis)
L3:	pass assignment sheets	(Leistungsnachweis)
BAES 3.4 (Vert. Sprachw. I):	pass assignment sheet	(Leistungsnachweis)
Magister:	pass assignment sheet	
Emp.Ling. K6.1:	do assignment sheets	(Teilnahmenachweis)
Erasmus (6CP)	pass assignment sheets	
- The assignment sheet is due **February 6**.
- You can reach a total of 39 points (+ 10 optional points). To pass the assignment sheet you have to reach more than 50% of the possible points, i.e. at least 20 points.
- The assignment sheet is built in such a way that **no two participants will hand in the same solutions**. You are free to work on the assignments in groups, but each of you has to hand in his or her individual solution.

Task 0: Take the same book as the basis for your answers that you had chosen last time. If your book happens to coincide with that of a fellow-student, make sure you use different examples nonetheless. This book will be the basis for your answers to the assignment sheet. State clearly which book you have chosen! Ideally include a link to a summary so that I get some information on the plot.

Task 1: Quantifiers (10 points)

Choose statements relating to the scenario of your book. Write down **one** formula with an **existential** quantifier, and **one** formula with a **universal** quantifier. **For each of the two** formula:

- Provide the standard paraphrase and indicate the restrictor and the scope.
- For each individual in your universe, indicate whether the restrictor and the scope are true for that individual.
- Given your results from (b), is the formula true in your model?
- In which way would your model have to be different to make the formula false (or, in case the formula is false: to make it true in your model)?

Task 2: Syntactic structure (13 points)

- Write a sentence that is true in the context of your book and that contains a **transitive verb** and two proper nouns.
- Provide the syntactic structure of this sentence according to the conventions introduced in class. Indicate the syntactic features at each node in the tree and the identities imposed by the principles of grammar (Phonology Principle, Head Feature Principle, and the combinatorial schemata)
- Explain in your words:
 - How does the HEAD value of the overall sentence follow from the lexical entries of the words and the principles of grammar?
 - How is it guaranteed by the principles of grammar that the PHON value of each word of the sentence will occur inside the PHON value of the overall sentence?

Task 3: General mechanisms of LRS (5 points)

1. Provide the logical form for the sentence from Task 2.
2. Indicate the PARTS lists for each node in the syntactic tree of the sentence. (Not the DR value, yet!)
3. Enumerate the logical forms that are compatible with the resulting PARTS list.

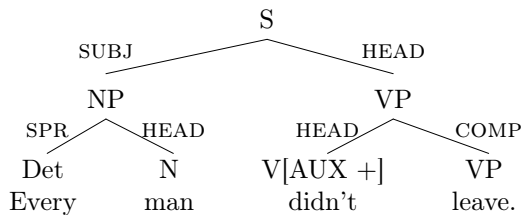
Task 4: Selection [from next week on, therefore optional] (5 points)

1. Provide the full lexical entry of the verb in your example sentence from Task 3 in such a way that it includes the **linking information**.
2. Show that only a reading with the right argument identification is possible when this lexical entry is used.

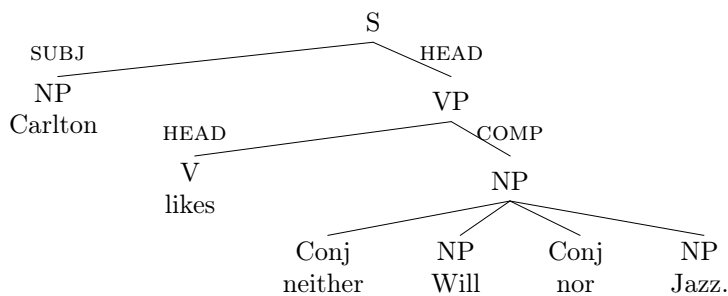
Task 5: More complex example (10 points)
(Optional)

For the following sentences: (a) Provide the PARTS lists for each word and each phrase within the indicated structure. (b) Show that the indicated logical forms are possible EX-CONT values of the sentences. (c) Which of the indicated formulæ should be excluded, though?

1. Every man didn't leave.
 Reading 1: $\forall x(\mathbf{man}_1(x) : \neg\mathbf{leave}_1(x))$
 Reading 2: $\neg\forall x(\mathbf{man}_1(x) : \mathbf{leave}_1(x))$
 Reading 3: $\forall x(\neg\mathbf{man}_1(x) : \mathbf{leave}_1(x))$



2. Cersei likes neither Tyrion nor Sansa.
 Reading 1: $\mathbf{like}_2(\mathbf{carlton}, \mathbf{will}) \vee \neg\mathbf{like}_2(\mathbf{carlton}, \mathbf{jazz})$
 Reading 2: $\neg(\mathbf{like}_2(\mathbf{carlton}, \mathbf{will}) \vee \mathbf{like}_2(\mathbf{carlton}, \mathbf{jazz}))$



Appendix: Principles of Grammar

Phonology Principle In every phrase, the PHON value of the mother is a concatenation of the PHON values of its daughters.

Head Feature Principle In every headed phrase, the HEAD value of the phrase is identical with the HEAD value of the head-daughter.

Head-Subject Structure In every head-subject structure,

- the valence lists of the phrase (SUBJ, SPR, COMPS) are empty,
- the COMPS and the SPR lists of the head-daughter are empty,
- the SUBJ list of the head-daughter contains exactly one element, which is identical with the nonhead-daughter.

Head-Complement Structure In every head-subject structure,

- the COMPS list of the phrase is empty,
- the SUBJ and the SPR lists of the head-daughter are identical with those of the phrase,
- the COMPS list of the head-daughter is non-empty and its elements are identical with the nonhead-daughters.

LRS Projection Principle In every phrase,

- the PARTS list of the phrase contains exactly all elements of the PARTS lists of the daughters,
- the EX-CONT value of the phrase is identical with the EX-CONT value of the head-daughter.

External Content Principles In every utterance, the EX-CONT value is a semantic expression that consists exactly of the elements of the utterance's PARTS lists.