

Home Examination Spring 2015 8 pages

SPR4106 – Syntax and Semantics in formal terms

26–29 May

Your paper must be submitted in the folder "Eksamensinnlevering" (in the Fronter "fellesrom") at 14:00 (2 pm) on the submission day. The folder will automatically close at this hour. If you have technical problems, contact the exam coordinator immediately. The first page of your paper must contain:

- Candidate number (4 numbers, which you find at StudentWeb), NO name
- Course code and course name (see above)
- Semester (spring or fall) and year

Please use an equivalent of Times New Roman, 12 pt, 1.5 line spacing in the body of the text. In the header you write your candidate number, course code and semester. All pages must be numbered. When submitting your paper, you must confirm that you are familiar with the University's rules regarding proper citation of sources. Make sure that you have enough time to read through the declaration.

For the exam set, you are to select: Syntax Module I or Syntax Module II, and, Semantics Module I or Semantics Module II. This gives you four options:

- 1. Syntax Module I + Semantics Module I,
- 2. Syntax Module I + Semantics Module II,
- 3. Syntax Module II + Semantics Module I,
- 4. Syntax Module II + Semantics Module II.

Syntax Module I

Task 1

Consider the following sentence, which is ungrammatical in English.

(1) *Him saw I.

Assume the following lexical entry for I:

(2)
$$I$$
 N (\uparrow PRED) = 'pro'
(\uparrow PERSON) = 1

This lexical entry, together with the minigrammar of English and the lexicon given in Falk's textbook, does not actually rule out (1). Draw a c-structure and an f-structure according to the rules in Falk and show that it is well-formed. Propose amended rules and lexical entries so as to rule out this sentence. Hint: introduce a CASE feature.

Task 2

In some languages word order is less important than in English. Consider the following sentences from Latin, all of which are grammatical and have the same meaning.

- (3) a. eum vidi ego he.ACC saw I.NOM 'I saw him.'
 - b. eum ego vidi
 - c. ego vidi eum
 - d. ego eum vidi
 - e. vidi ego eum
 - f. vidi eum ego

However, the following sentences are ungrammatical and remain so even if the word order changes.

- (4) a. *eum vidi me
 - he.ACC saw I.ACC
 - b. *is vidi ego he.NOM saw I.NOM

Propose c-structure rules and lexical entries that will accept all sentences in (3). Draw a c-structure and an f-structure for one of the sentences. Explain why the sentences in (4) are ruled out.

Task 3

Some Latin verbs require a different case for the object, e.g. (5).

(5) is mihi sucurrit. he.NOM I.DAT helped 'He helped me.'

How would you account for these? Explain any differences you see between how the CASE features work in Latin and in English. How are grammatical functions assigned in the two languages?

Syntax Module II

Task 1

Consider the following sentence, which is ungrammatical in English.

(1) *Peter seems that he is winning.

Falk (p. 216) gives two different lexical entries for *seem*. Draw c- and fstructures for this sentence using both lexical entries and explain in detail why the sentence is ill-formed on either analysis. Give examples of grammatical sentences of English expressing the intended content of (1) using both versions of *seem*.

Task 2

However, the following sentence is grammatical:

(2) Peter seems like he is winning.

Assume that *seems* in (2) is one of the two versions of the verb mentioned in Falk. Propose a lexical entry for *like* and motivate your choice. Draw the f-structure of this sentence.

Task 3

Ash Asudeh (*The logic of pronominal resumption*, Oxford 2012) argues that in some dialects of English, the subject of *seem* must bind a pronoun somewhere in the complement of *like*. That is, *he* in (2) must be bound by *Peter*. Moreover, we get the judgments in (3).

- (3) a. *Peter seems like Mary is winning.
 - b. Peter seems like Mary just beat him.
 - c. Peter seems like the judges ruled that Mary has beaten him.

Explain how you would formalize this requirement and show how your formalization works for the examples in (3). How would this requirement be introduced? Is it associated with a particular lexical item?

Semantics Module I

Task 1

In his speech in West Berlin on June 26, 1963, John F. Kennedy said:

(1) All free men, wherever they may live, are citizens of Berlin.

Let us simplify this sentence a bit:

(2) Every free man is a citizen of Berlin.



How do Zimmermann and Sternefeld treat the three words is, a, and of in a sentence like this (cf. Chapter 5, Section 4 and Chapter 6, Section 5)?

Fill in the extensions of these complex expressions in (2):

- 1. $[[\text{citizen of Berlin}]]_s = \dots$
- 2. $\llbracket \text{free man} \rrbracket_s = \dots$
- 3. [every free man] $_s = \dots$
- 4. [[every free man is a citizen of Berlin]] $_s = 1$ iff ...

(Cf. Chapter 5, Sections 4 and 5.2 and Chapter 6, Section 1.) (You may treat the extensions of *citizen*, *free* and *man* at *s* simply as, respectively, $[citizen]_s$, $[free]_s$ and $[man]_s$. Assume that $[Berlin]_s = b$.)

Task 2

In Chapter 7, Section 4.1, Zimmermann and Sternefeld define conjunction as intersection between two propositions, sets of worlds:

(3) $\llbracket S_1 \text{ and } S_2 \rrbracket := \llbracket S_1 \rrbracket \cap \llbracket S_2 \rrbracket$

How would disjunction be defined, as the intension of S_1 or S_2 ?

Now consider or as occurring in (4):

(4) Every male or female citizen is a voter.

How would you vary your definition of disjunction to cover this case? (Cf. Chapter 5, Section 5.2.)

Observe that (5) can be used in the same sense as (4), even though (6) does not make much sense:

- (5) Every male and female citizen is a voter.
- (6) #Every male female citizen is a voter.

Explain why this is surprising, and try to think of a way to 'salvage' (5) – keyword: ellipsis.



Semantics Module II

Task 1

In his song Imagine (Apple, 1971), John Lennon sings:

(1) You may say I'm a dreamer, but I'm not the only one.

Let us simplify this sentence a little:

(2) John is not the only dreamer.

Figure out intuitively what this sentence presupposes and what it asserts (cf. Chapter 9, Sections 2–3).



It turns out to be difficult to account for this case under either one of the two classical analyses of definiteness, the naïve and the quantificational analysis (cf. Chapter 9, Section 1). Determine what extensions they predict for (2), 1, 0 or undefined, in the 5 situations in Table 1, assuming

- that is denotes the identity relation (cf. Chapter 6, Section 5) and
- this simple semantics for only: $[[only_{adj} N]]_s = \{x : \{x\} = [[N]]_s\}.$

(Q = the quantificational analysis (Russell), N = the naïve analysis (Frege))

	$1, 0 ext{ or } -$ under Q	1, 0 or - under N
there is exactly one dreamer in s , namely John		
there is exactly one dreamer in s , namely Yoko		
there are many dreamers in s , and John is one		
there are many dreamers in s , but John isn't one		
there are no dreamers in s		

Table 1: Situations and extensions for (2) under two analyses of the

After filling in 1, 0 or – (undefined), assess what is okay and what isn't.

Task 2

According to the definition of *every* given in Chapter 6, Section 1, a sentence like (3) will automatically be true if there happens to be no honest politician. (4) will also be true in such circumstances.

(3) Every honest politician is female.

(4) Every honest politician is male.

This is widely felt to be counterintuitive, and you may want to improve the definition to remedy the situation. How would you go about completing (5)?

(5)
$$\llbracket \text{every N} \rrbracket_s = \begin{cases} \text{iff} \\ \text{undefined} & \text{otherwise} \end{cases}$$

You have now added a so-called non-triviality presupposition to $[\![\, every\,]\!].$

Now in a case like (6), does that move seem necessary, or even desirable?

(6) You must release every fish you catch.

Identify the essential difference between this case and a case like (3) or (4), in the light of this definition of *must* (cf. Exercise 2 in intosemexerch8.pdf):

 $\llbracket must \rrbracket_w = \{ \mathbf{p} : \cap \mathbf{H}_w \subseteq \mathbf{p} \}$

Try to explain how this distinctive property of (6) and other sentences like it makes a non-triviality assumption superfluous (keyword: possible worlds).

The results will be published in Studentweb within 3 weeks after the exam date.

For an explanation of the result obtained, please contact the teacher in charge of the course within one week after the exam results have been published. Remember to include your name and candidate number. The examiner will then decide whether to give a written or oral explanation.