Prof. Marcus Kracht: Ling 20. Fall 2007.

Assignment C [Week 4] (Do exercises for a total of 20 points)

[C1.] (10 points) Here are some affixes: /pre/, /al/ and /pro/. Determine for each of them

- ① whether they are prefixes (= added before the word) or suffixes (= added after the word),
- 2 which word class they can be affixed to, and
- ③ into which word class the result falls.

Give at least two examples of their use in each case. Further, disect the word /fundamentalism/ into a root plus affixes as best as you can. Do the same for /experimental/.

[C2.] (10 points) Let the following sentence be given:

- (1) Some squirrels are faster than Paul.
 - ① Try to establish the constituents of this sentence, by doing some substitution tests.
 - ② Say which constituent is an immediate constituent of which other constituent according to your analysis.
 - 3 Draw the tree corresponding to your analysis.

[C3.] (10 points) Let the following context free grammar be given. The start symbol is S, the nonterminal symbols are S, A, B, C, D, E and F.

- (2a) $S \rightarrow BC$
- (2b) $B \rightarrow DE$
- (2c) D \rightarrow the | some
- (2d) $E \rightarrow \text{student} \mid \text{mouse}$
- (2e) $C \rightarrow FB$
- (2f) $F \rightarrow \text{watches} \mid \text{criticizes}$
 - Give one complete derivation of a string.

- **2** Can you give standard names for the constituents of this grammar? (Use the grammar at the end of Lecture 8 for such labels.)
- 3 Describe the language generated by the grammar

 $S \to \text{anti } S \, \text{missile} \, | \, \text{missile}$