Classwork N°10 due to 4th May 2012

Exercise: "Application of combinators to natural language analysis: aspecto-temporal analysis"

1. Derived combinators

We introduce the powers of a combinator X^n and the deferred combinators X_n , where the X is a combinator.

(a) B₅C₂B²CB² x y z f g
(b) B₃(C₂B²) x y z f g

(c) $C_3B_2B \ge y \ge f$

(d) $(B^2C_3)BB^2C \ge y \ge fg$

2. Introduction of the aspecto-temporal operators.

Give the representation of the following discourses by using the aspecto-temporal operators; STATE(O), EVENT(F), PROC(J), I-SAY.

<u>Dialogue a.</u>

This morning, a car accident occurred (on a certain street intersection). A man hit someone with his red car and flew away. The police chase the red car (at this moment).

<u>Dialogue b.</u>

Anna is explicating the reason for being late (to her boss): "I went to the garage. And I found that I forgot to put oil in the car. So I have taken the bus." (Lascarides and Asher, 1993)

(1) Give the predicate-argument structure of the sentences

- (2) Define the temporal relations between the sentences and formalize it
- (3) Try to establish the enunciative schemes of the given dialogues