

Classwork N°8  
due to 20th April 2012

Exercise: “Application of combinators to natural language analysis: Passivisation”

1. There are couples of the sentences having the paraphrastic relations. What is the relation of these two sentences? What is the invariant of meaning of them? Please show and explain it using the combinators.

$((Cf)(x))(y)$	$(f(y))(x)$
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$(f(y))(x)$	$(Cf)(x)(y)$

(a.1) He opened the door.

(a.2) The door was opened

(b.1) Anna gave the money to John.

(b.2) The money was given to John by Anna.

(c.1) The police chases the car.

(c.2) The car flees the police.

(d.1) I sent a card to my mother.

(d.2) My mother received a card from me.

2. Define and apply the operators of the passivisation to the following sentences in Czech.

(e.1) Petr chválí Pavla (Peter praises Paul)

(e.2) Pavel je chválen Petrem (Paul is praised by Peter)

(f.1) To okno bylo rozbito včera. (Kdo to udělal?)

→ The window was broken yesterday

(f.2) To okno se rozbilo včera. (\*Kdo to udělal?) (!REFLEXIVISATION!)

→ The window broke (itself) yesterday