

CCG Compositional Semantic Derivations

Syntax and Semantics of Natural Language, ACS 2013
Assignment 2 © Ted Briscoe (ejb@c1.cam.ac.uk) GS18

1 Deadline

Please hand in your assignment to the student office by noon on 25th February. We will have a feedback session at the lecture the following day.

2 Task

Provide FOL formulæ which capture the meaning of the 4 sentences below. Add a rule-to-rule type-driven compositional semantics to CCG using the lambda calculus which constructs these formulæ for each sentence from CCG derivations. To do this you will need to associate a semantics with each lexical item and a corresponding compositional rule with each syntactic combination rule (schema) you use in the derivation. Briefly discuss any issues which arise with respect to each example. Optionally run the sentences through the on-line demo of C&C+Boxer at <http://svn.ask.it.usyd.edu.au/trac/candc/wiki/Demo> and assess to what extent the right semantic representation is associated with them.

3 Sentences

- (1) The man gave Raymond the book.
- (2) Raymond gave the expensive book to every woman.
- (3) John gave Mary and provided Raymond with some books.
- (4) Raymond pitied the man who John brutally kicked.