Grammar Development in Constraint-Based Grammar Formalisms

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Exercise Sheet 6

In preparation of this exercise, please create a subdirectory

`sample-grammars/ex6`

under one of your directories. Please copy the files from our directory `sample-grammars/ex6-basis` to your new subdirectory.

The grammar in `sample-grammars/ex6-basis` represents a simple NP grammar for English which license NPs that consist of a determiner such as *the* und a singular count noun such as *computer*. This grammar is different from the NP grammar you developed for exercise ex3.3 in that it uses the SPR and SPEC attributes introduced in class.

1. Please modify your grammar in such a way that it will also license Nps that consist of a determiner such as `two` and a plural count noun such as `apples`.
2. Now modify the grammar further so that it will also license NPs that contain adjectives such as *the red computer*, *two ripe apples* und *the red, ripe apples.*

   Syntactic selection of the noun by the adjective should be via the MOD feature, as discussed in class. (see also Pollard/Sag 1994, p. 55-57, 88-91 for further details).

Hints:

- In specifying your grammar, you may restrict yourself to syntactic structure. For simplicity, the compositional semantics may be left unspecified.
- Please make sure that your head-adjunct ID schema can be applied recursively so that NPs with arbitrarily many adjectives can be licensed.
- Please make sure that singular/plural agreement between determiners and nouns is enforced by your grammar.