SS 08 22. April 2008

#### Frank Richter:

# Grammatikformalismen für die Computerlinguistik

## Homework Assignment 1

The purpose of the first homework assignment is to make sure that the course software works on everyone's account. **Due on April 28th**.

Please send the files to fr@sfs.uni-tuebingen.de in attachments to an email with subject line 'grammar formalisms homework.'

#### Exercise 1. [4 points]

Download and install MoMo 2.0 from the seminar page:

(www.sfs.uni-tuebingen.de/~fr/teaching/ss08/gfcl/). Note that the installation procedure is described in detail in the MoMo manual (on pages 5 and 6). The MoMo manual is available from the seminar page as well. Open the file example1.mmp by selecting the menu item *Open* under *File* and choosing the file of that name from the selection in the window.

In the first window (the *note pad* window) of MoMo you will see the line [parrot,woodpecker,canary] in the *description area*. Add a second line under this line. The new line should contain the symbol % at the beginning, followed by a space and your name. Save the modified file, calling it your-last-name.mmp.

#### Exercise 2. [4 points]

Activate the TRALE system on your SfS account by including the paths /afs/sfs/lehre/fr/newtrale/bin and /afs/sfs/lehre/fr/gralej/bin in your path environment. Create a new directory on your account and download the Core Fragment (Fragment I) from the Grammar Formalisms and Parsing textbook to this directory. You can get it by downloading the grammar files of Section 3.2.1 from www.sfs.uni-tuebingen.de/~fr/teaching/ws07-08/lp/grammars.html (this page is linked from the seminar page under Software and Manuals). The grammar consists of two files, one called signature and the other called theory.pl. By inspecting the second file you can easily find out which words are in the grammar, even without understanding the grammar itself. From the words you can guess which sentences can be parsed.

Start TRALE in the new directory with the two grammar files by first typing gralej & (starts the graphical interface) and then newtrale -f localhost 1080 & (starts the system itself). Compile the grammar by typing c. <Return> at the Prolog prompt of the Emacs window. Parse two grammatical sentences described by the grammar. The format of the parse predicate is as follows:

### rec[this,is,the,sentence,i,would,like,to,parse]. <Return>

For each sentence which you parse the graphical interface of TRALE (GraleJ, formerly called Grisu) opens a new window with the parse result. Save two different parse results, giving them intuitive names, using the *Save* function under the menu item *File* of the GraleJ window.

You can shut down TRALE by typing halt. <Return> at the Prolog prompt. This terminates the active Prolog process, and you can then safely close the Emacs window and GraleJ.